



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist

for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAI 90/94 (I-90/94 Southbound Lanes) Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

I-90/I-94 southbound lanes between Grand Avenue and 14th Street (ISGS #2615V2-1)

City: Chicago State: IL Zip Code: 60207

County: Cook Township: NA

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.87549 Longitude: - 87.64563

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: 0316325541 BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): _____ Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 50,891

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

See Attachment A for a list of boring locations within the construction zone adjacent to ISGS #2615V2-1(ROW). Refer to PSI Report for ISGS #2615V2-1 (ROW) including Table 4-4, and Figures 4-2, 4-3, 4-4, 4-5, 4-6, 4-7, 4-8, 4-9, 4-10, 4-11, and 4-12.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

See attached data summary table and associated laboratory data packages J172620-1, J172777-1, J173293-1, J173369-1, J173437-1, J173576-1, J173686-1, J173687-1, J173762-1, J173939-1, J173940-1, J174037-1, J174115-1, J174194-1, J174357-1, J174404-1, J174842-1, J174842-2, J174927-1, J150990-1, J151344-1, and J175006-1.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Neil Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

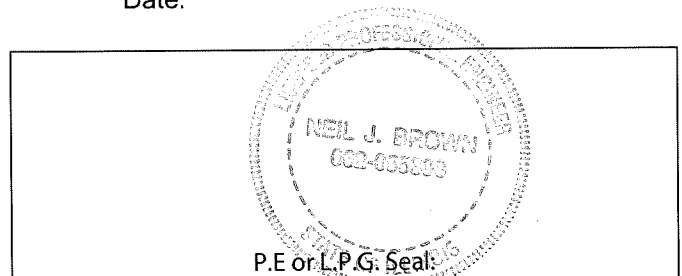
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Ecology and Environment, Inc.
Street Address: 33 West Monroe
City: Chicago State: IL Zip Code: 60603
Phone: 312-578-9243

Neil J. Brown
Printed Name:

Neil J. Brown
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

2-6-2020
Date:



Attachment A – Soil Boring Locations from ISGS #2615V2-1 (ROW)

2615V2-01-B01	2615V2-AI-B01	2615V2-118-B07
2615V2-01-B02	2615V2-AI-B02	2615V2-118-B12
2615V2-01-B03	2615V2-AI-B04	2615V2-118-B31
2615V2-01-B07	2615V2-AI-B05	2615V2-118-B35
2615V2-01-B08	2615V2-AI-B08	
2615V2-01-B09	2615V2-AI-B09	
2615V2-01-B12	2615V2-AI-B10	
2615V2-01-B13	2615V2-AI-B11	
2615V2-01-B14	2615V2-AI-B12	
2615V2-01-B16	2615V2-AI-B15	
2615V2-01-B19	2615V2-AI-B16	
2615V2-01-B21	2615V2-AI-B18	
2615V2-01-B22	2615V2-AI-B19	
2615V2-01-B24	2615V2-AI-B20	
2615V2-01-B25	2615V2-AI-B21	
2615V2-01-B26	2615V2-AI-B22	
2615V2-01-B27	2615V2-AI-B23	
2615V2-01-B28	2615V2-AI-B25	
2615V2-01-B30	2615V2-AI-B26	
2615V2-01-B33	2615V2-AI-B27	
2615V2-01-B34	2615V2-AI-B28	
2615V2-01-B38		
2615V2-01-B39		
2615V2-01-B40		
2615V2-01-B42		
2615V2-01-B43		
2615V2-01-B44		
2615V2-01-B45		
2615V2-01-B46		
2615V2-01-B47		
2615V2-01-B48		
2615V2-01-B49		
2615V2-01-B51		
2615V2-01-B52		
2615V2-01-B53		
2615V2-01-B54		
2615V2-01-B55		
2615V2-01-B56		
2615V2-01-B57		
2615V2-01-B58		
2615V2-01-B59		
2615V2-01-B60		
2615V2-01-B61		
2615V2-01-B62		
2615V2-01-B63		
2615V2-01-B64		

Additional IEPA BOL Site Numbers from ISGS #2615V2-1 (ROW)

0316375058

0316375140

Analytical Data Summary

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in
Uncontaminated Soil Used as Fill Material At Regulated Fill Operations

mg/kg = Milligrams per kilogram.

mg/L = Milligrams per liter.

MSA = Metropolitan Statistical Area

TACO = Tiered Approach to Corrective Action Objectives

TCLP = Toxicity Characteristic Leaching Procedure.

SCGIER = Soil Component of the Groundwater Ingestion Exposure Route

SPLP = Synthetic Precipitation Leaching Procedure.

ND = Not detected.

NA = Not analyzed or not applicable.

J = Estimated value.

U = Analyte was analyzed for but not detected.

PID = Photoionization detector.

-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

= pH is less than 6.25 or greater than 9.0 standard units.

** = Headspace reading above background (outside of instrument margin of error).

† = Concentration exceeds the most stringent MAC.


m = Concentration exceeds the MAC for an MSA.


* = Concentration exceeds the MAC for Chicago corporate limits.

c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.

r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.

L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.

 = Headspace reading exceeds background levels

 = Concentration exceeds the most stringent MAC, but is below the MAC for an MSA.

 = Concentration exceeds the most stringent MAC and the MAC for Chicago corporate limits.

 = Concentration exceeds applicable comparison criteria.

**PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN**

SITE	2615V2-1 (ROW)			Comparison Criteria					
	2615V2-01-B01	2615V2-01-B02	2615V2-01-B03	MACs			TACO		
BORING	2615V2-01-B01 (0-5)	2615V2-01-B02 (0-5)	2615V2-01-B03 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE									
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-5	0-4						
pH	8.4	7.7	8.1						
PID > Bkd	--	--	--						
VOCs (None Detect)									
SVOCs (mg/kg)									
2-Methylnaphthalene	0.017 J	0.034 J	0.066 J	--	--	--	--	--	--
Acenaphthene	0.064	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.033 J	ND U	ND U	--	--	--	--	--	--
Anthracene	0.21	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.87 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.85 J †	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.72 J	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.35 J	0.016 J	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.84 J	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	0.092 J	ND U	ND U	46	--	--	46	4,100	--
Chrysene	0.7 J	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.045	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	1.6 J	0.02 J	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.068	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.34 J	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.017 J	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.84 J	0.11	0.11	--	--	--	--	--	--
Pyrene	1.5 J	0.032 J	0.021 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	0.51 J	0.59 J	0.49 J	5	--	--	31	82	--
Arsenic	5.7 J	8.1	8.3	11.3	13	--	13	61	--
Barium	53 J	41	45	1,500	--	--	5,500	14,000	--
Beryllium	0.46	0.62	0.63	22	--	--	160	410	--
Boron	14 J	14	14	40	--	--	16,000	41,000	--
Cadmium	0.41	ND U	ND U	5.2	--	--	78	200	--
Calcium	120,000 J	58,000	60,000	--	--	--	--	--	--
Chromium	13 J	16	16	21	--	--	230	690	--
Cobalt	9.6	15	13	20	--	--	4,700	12,000	--
Copper	31 J	33	26	2,900	--	--	2,900	8,200	--
Iron	13,000	20,000 †m	21,000 †m	15,000	15,900	--	--	--	--
Lead	140 J †	15	14	107	--	--	400	700	--
Magnesium	66,000 J	25,000	25,000	325,000	--	--	--	730,000	--
Manganese	320 J	360	330	630	636	--	1,600	4,100	--
Mercury	0.08	0.021	0.02	0.89	--	--	10	0.1	--
Nickel	21	39	35	100	--	--	1,600	4,100	--
Potassium	1,800 J	3,000	3,000	--	--	--	--	--	--
Selenium	0.41 J	0.59	0.51 J	1.3	--	--	390	1,000	--
Silver	1.8	2.6	2.7	4.4	--	--	390	1,000	--
Sodium	640	370	910	--	--	--	--	--	--
Thallium	0.34 J	1.1	0.89	2.6	--	--	6.3	160	--
Vanadium	14	18	18	550	--	--	550	1,400	--
Zinc	88 J	50	52	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.26 J	0.35 J	0.45 J	--	--	--	--	--	2
Cobalt	ND U	0.016 J	ND U	--	--	--	--	--	1
Manganese	ND U	0.94 L	0.94 L	--	--	--	--	--	0.15
Nickel	ND U	0.07	0.036	--	--	--	--	--	0.1
SPLP Metals (mg/L)									
Manganese	NA	0.056	0.63 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)					Comparison Criteria					
	2615V2-01-B07	2615V2-01-B08	2615V2-01-B09	2615V2-01-B12	2615V2-01-B13	MACs			TACO		
BORING	2615V2-01-B07 (0-6)	2615V2-01-B08 (0-7)	2615V2-01-B09 (0-7)	2615V2-01-B12 (0-7)	2615V2-01-B13 (0-7)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	0-7	0-7	0-7	0-7						
DEPTH (feet)	8.3	7.6	7.8	8.9	8.8						
pH	--	--	--	--	--						
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	ND U	0.019	ND U	0.0092 J	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.04 J	0.034 J	0.043 J	0.065 J	0.57	--	--	--	--	--	--
Acenaphthene	0.045	ND U	ND U	ND U	2.2	570	--	--	4,700	120,000	--
Acenaphthylene	0.025 J	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.11	ND U	ND U	0.021 J	1.6	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.42	ND U	ND U	0.036 J	0.91 †	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.39 †	ND U	ND U	ND U	0.22 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.56	ND U	ND U	0.042	0.5	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.16	ND U	ND U	0.014 J	0.056	--	--	--	--	--	--
Benzo(k)fluoranthene	0.22	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	0.071 J	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	0.48	0.6	--	--	32	6,200	--
Chrysene	0.42	0.043	0.025 J	0.063	0.9	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.034 J	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	1.7	--	--	--	--	--	--
Fluoranthene	0.84	0.018 J	ND U	0.089	7.9	3,100	--	--	3,100	82,000	--
Fluorene	0.037 J	0.01 J	ND U	0.021 J	4	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.14	ND U	ND U	0.015 J	0.048	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.032 J	ND U	ND U	ND U	1.1	1.8	--	--	170	1.8	--
Phenanthrene	0.5	0.13	0.12	0.21	16	--	--	--	--	--	--
Pyrene	0.81	0.034 J	0.022 J	0.087	5.4	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	ND U	0.48 J	0.42 J	0.47 J	0.58 J	5	--	--	31	82	--
Arsenic	5.4	6.7	7.5	7.8	7.5	11.3	13	--	13	61	--
Barium	48	43	34	39	39	1,500	--	--	5,500	14,000	--
Beryllium	0.49	0.65	0.59	0.73	0.67	22	--	--	160	410	--
Boron	13	15	13	15	14	40	--	--	16,000	41,000	--
Calcium	110,000	57,000	70,000	53,000	56,000	--	--	--	--	--	--
Chromium	12	17	13	16	15	21	--	--	230	690	--
Cobalt	8.3	15	13	14	14	20	--	--	4,700	12,000	--
Copper	20	29	28	32	27	2,900	--	--	2,900	8,200	--
Iron	12,000	21,000 †m	18,000 †m	19,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	24	16	14	16	15	107	--	--	400	700	--
Magnesium	61,000	24,000	30,000	22,000	23,000	325,000	--	--	--	730,000	--
Manganese	290	360	420	300	320	630	636	--	1,600	4,100	--
Mercury	0.052	0.017 J	0.02	0.022	0.02	0.89	--	--	10	0.1	--
Nickel	22	40	33	37	35	100	--	--	1,600	4,100	--
Potassium	1,900	3,200	2,600	3,200	2,900	--	--	--	--	--	--
Selenium	0.6	ND U	0.45 J	0.61	0.63	1.3	--	--	390	1,000	--
Silver	1.4	2.5	2.2	2.3	2.2	4.4	--	--	390	1,000	--
Sodium	320	330	360	1,700	2,700	--	--	--	--	--	--
Thallium	0.63	1	0.69	1	0.82	2.6	--	--	6.3	160	--
Vanadium	14	18	15	19	17	550	--	--	550	1,400	--
Zinc	49	48	44	58	50	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.57	0.36 J	0.68	0.6	0.6	--	--	--	--	--	2
Boron	0.12 J	ND U	ND U	0.088 J	0.086 J	--	--	--	--	--	2
Cadmium	0.0022 J	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Cobalt	0.013 J	0.011 J	0.016 J	0.019 J	0.015 J	--	--	--	--	--	1
Iron	0.25 J	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Manganese	1.7 L	1.4 L	1.8 L	2 L	2 L	--	--	--	--	--	0.15
Nickel	0.023 J	0.036	0.046	0.049	0.045	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	0.22 L	0.022 J	0.021 J	0.99 L	1 L	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)		Comparison Criteria						
BORING	2615V2-01-B14		MACs			TACO			
SAMPLE	2615V2-01-B14 (0-5)	2615V2-01-B14 (5-9)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	
MATRIX	Soil	Soil							
DEPTH (feet)	0-5	5-9							
pH	8.6	7.8							
PID > Bkd	--								
VOCs (None Detect)									
SVOCs (mg/kg)									
2-Methylnaphthalene	0.089	0.051 J	--	--	--	--	--	--	
Anthracene	0.0076 J	ND U	12,000	--	--	23,000	610,000	--	
Benzo(a)anthracene	0.015 J	ND U	0.9	1.8	1.1	1.8	170	--	
Benzo(a)pyrene	0.016 J	ND U	0.09	2.1	1.3	2.1	17	--	
Benzo(g,h,i)perylene	0.028 J	ND U	--	--	--	--	--	--	
Chrysene	0.051	0.019 J	88	--	--	88	17,000	--	
Fluoranthene	0.032 J	ND U	3,100	--	--	3,100	82,000	--	
N-Nitrosodiphenylamine	ND U	0.06 J	1	--	--	130	25,000	--	
Phenanthrene	0.18	0.074	--	--	--	--	--	--	
Pyrene	0.046	0.011 J	2,300	--	--	2,300	61,000	--	
Inorganics (mg/kg)									
Antimony	0.39 J	0.61 J	5	--	--	31	82	--	
Arsenic	8.5	7.7	11.3	13	--	13	61	--	
Barium	42	47	1,500	--	--	5,500	14,000	--	
Beryllium	0.6	0.69	22	--	--	160	410	--	
Boron	14	16	40	--	--	16,000	41,000	--	
Calcium	57,000	57,000	--	--	--	--	--	--	
Chromium	16	17	21	--	--	230	690	--	
Cobalt	16	14	20	--	--	4,700	12,000	--	
Copper	39	27	2,900	--	--	2,900	8,200	--	
Iron	21,000 †m	21,000 †m	15,000	15,900	--	--	--	--	
Lead	17	14	107	--	--	400	700	--	
Magnesium	24,000	24,000	325,000	--	--	--	730,000	--	
Manganese	370	340	630	636	--	1,600	4,100	--	
Mercury	0.019	0.018 J	0.89	--	--	10	0.1	--	
Nickel	40	37	100	--	--	1,600	4,100	--	
Potassium	3,100	3,200	--	--	--	--	--	--	
Selenium	0.7	0.52 J	1.3	--	--	390	1,000	--	
Silver	2.5	2.7	4.4	--	--	390	1,000	--	
Sodium	1,400	860	--	--	--	--	--	--	
Thallium	1.1	0.82	2.6	--	--	6.3	160	--	
Vanadium	18	20	550	--	--	550	1,400	--	
Zinc	53	52	5,100	--	--	23,000	61,000	--	
TCLP Metals (mg/L)									
Barium	0.8	0.74	--	--	--	--	--	2	
Cobalt	0.017 J	0.01 J	--	--	--	--	--	1	
Manganese	1.9 L	1.8 L	--	--	--	--	--	0.15	
Nickel	0.056	0.033	--	--	--	--	--	0.1	
SPLP Metals (mg/L)									
Manganese	1.3 L	0.04	--	--	--	--	--	0.15	

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)					Comparison Criteria					
	2615V2-01-B16				2615V2-01-B19	MACs			TACO		
BORING											
SAMPLE	2615V2-01-B16 (0-5)	2615V2-01-B16 (5-10)	2615V2-01-B16 (10-15)	2615V2-01-B16 (15-20)	2615V2-01-B19 (0-7)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	15-20	0-7						
pH	8.4	8.8	7.9	7.7	8.9						
PID > Bkd	--				--						
VOCs (mg/kg)											
Acetone	0.018	ND U	0.012 J	ND U	0.026 J	25	--	--	70,000	100,000	--
Benzene	ND U	0.00057 J	ND U	ND U	ND U	0.03	--	--	0.8	2.2	--
Trichloroethene	0.00073 J	ND U	ND U	ND U	ND U	0.06	--	--	5	12	--
Xylenes, Total	0.0006 J	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.059 J	0.1	0.046 J	0.072 J	0.0091 J	--	--	--	--	--	--
Acenaphthene	0.063	0.31	ND U	ND U	0.011 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.028 J	ND U	ND U	0.0061 J	--	--	--	--	--	--
Anthracene	0.081	0.22	ND U	ND U	0.038	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	0.31	ND U	ND U	0.13	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	0.27 †	ND U	ND U	0.15 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	0.32	ND U	ND U	0.2	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	0.087	ND U	ND U	0.09	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.22	ND U	ND U	0.073	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	0.22	46	--	--	46	4,100	--
Carbazole	ND U	0.11 J	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.052	0.36	ND U	ND U	0.16	88	--	--	88	17,000	--
Dibenzofuran	0.088 J	0.26	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.14	0.92	ND U	0.038 J	0.24	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.21	ND U	ND U	0.01 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.069	ND U	ND U	0.069	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	0.29	ND U	ND U	0.021 J	1.8	--	--	170	1.8	--
Phenanthrene	0.41	0.92	0.13	0.2	0.15	--	--	--	--	--	--
Pyrene	0.14	0.92	ND U	0.054	0.3	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	ND U	ND U	ND U	ND U	0.36 J	5	--	--	31	82	--
Arsenic	7.7	7.6	8	7.2	1.1	11.3	13	--	13	61	--
Barium	38	29	42	41	8	1,500	--	--	5,500	14,000	--
Beryllium	0.61	0.59	0.65	0.66	0.16 J	22	--	--	160	410	--
Boron	15	14	18	18	11	40	--	--	16,000	41,000	--
Calcium	49,000	49,000	55,000	58,000	140,000	--	--	--	--	--	--
Chromium	15	14	17	17	5.4	21	--	--	230	690	--
Cobalt	15	14	15	14	1.7	20	--	--	4,700	12,000	--
Copper	33	30	27	27	12	2,900	--	--	2,900	8,200	--
Iron	18,000 †m	16,000 †m	19,000 †m	19,000 †m	2,900	15,000	15,900	--	--	--	--
Lead	17	19	15	14	51	107	--	--	400	700	--
Magnesium	21,000	20,000	23,000	23,000	84,000	325,000	--	--	--	730,000	--
Manganese	290	270	310	300	120	630	636	--	1,600	4,100	--
Mercury	0.047	0.024	0.017 J	0.015 J	0.019	0.89	--	--	10	0.1	--
Nickel	39	36	39	38	5.8	100	--	--	1,600	4,100	--
Potassium	2,800	2,600	3,100	3,100	670	--	--	--	--	--	--
Selenium	0.8	0.65	0.98	0.69	0.39 J	1.3	--	--	390	1,000	--
Silver	2	1.9	2.2	2.2	ND U	4.4	--	--	390	1,000	--
Sodium	980	1,000	640	280	680	--	--	--	--	--	--
Thallium	1.2	0.98	1	1	ND U	2.6	--	--	6.3	160	--
Vanadium	18	17	20	20	7	550	--	--	550	1,400	--
Zinc	74	57	59	60	33	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.66	0.5	0.69	0.68	0.16 J	--	--	--	--	--	2
Boron	0.074 J	0.058 J	0.09 J	0.099 J	ND U	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	0.0025 J	--	--	--	--	--	0.005
Cobalt	0.023 J	0.013 J	0.013 J	0.012 J	0.02 J	--	--	--	--	--	1
Lead	ND U	ND U	ND U	ND U	0.027 L	--	--	--	--	--	0.0075
Manganese	1.8 L	1.7 L	1.8 L	1.8 L	0.87 L	--	--	--	--	--	0.15
Nickel	0.059	0.031	0.038	0.035	0.02 J	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	0.13 J	--	--	--	--	--	5
SPL Metals (mg/L)											
Manganese	0.72 L	0.68 L	0.2 L	0.12	ND U	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #43A, Contract 60X79
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V-118 (IDOT ROW)								Comparison Criteria					
	2615V-118-B12								MACs			TACO		
BORING	2615V-118-B12 (0-5)	2615V-118-B12 (5-10)	2615V-118-B12 (5-10) D	2615V-118-B12 (10-15)	2615V-118-B12 (15-23)	2615V-118-B12 (23-31)	2615V-118-B12 (31-39)	2615V-118-B12 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	5-10	10-15	15-23	23-31	31-39	39-47						
pH	8.3	8.0	7.8	8.0	8.6	8.7	8.6	8.1						
PID > Bkgd.	--	--	--	--	--	--	--	--						
VOCs (None Detect)														
SVOCs (mg/kg)														
2-Methylnaphthalene	ND U	ND U	ND U	0.058 J	0.034 J	0.031 J	0.048 J	0.066 J	--	--	--	--	--	--
Acenaphthene	ND U	0.027 J	0.021 J	0.027 J	0.011 J	0.012 J	0.012 J	ND U	570	--	--	4,700	120,000	--
Anthracene	0.0077 J	ND U	ND U	ND U	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.034 J	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.037 J	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.057	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.019 J	ND U	ND U	ND U	ND U	0.023 J	0.024 J	0.028 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.027 J	ND U	ND U	ND U	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Chrysene	0.044	ND U	0.033 J	0.034 J	0.025 J	0.031 J	ND U	0.035 J	88	--	--	88	17,000	--
Fluoranthene	0.067	ND U	ND U	ND U	ND U	ND U	0.0083 J	0.010 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.0091 J	0.012 J	0.0082 J	0.0098 J	0.012 J	0.014 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.018 J	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	0.012 J	ND U	ND U	0.012 J	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.042	0.20	0.15	ND U	0.10	0.13	0.16	0.13	--	--	--	--	--	--
Pyrene	0.066	0.031 J	0.024 J	ND U	0.023 J	0.026 J	0.038 J	0.036 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)														
Antimony	ND U	ND U	ND U	ND U	ND U	ND U	0.31 J	0.43 J	5	--	--	31	82	--
Arsenic	8.0	8.9	8.2	8.2	7.7	7.4	7.3	7.2	11.3	13	--	13	61	--
Barium	120	27	25	33	40	39	45	48	1,500	--	--	5,500	14,000	--
Beryllium	0.69	0.67	0.63	0.71	0.75	0.77	0.72	0.71	22	--	--	160	410	--
Boron	7.3	17	16	18	19	18	22	21	40	--	--	16,000	41,000	--
Calcium	10,000	60,000	69,000	65,000	57,000	55,000	63,000	71,000	--	--	--	--	--	--
Chromium	19	14	13	15	17	17	18	18	21	--	--	230	690	--
Cobalt	11	14	13	13	14	14	13	13	20	--	--	4,700	12,000	--
Copper	21	36	32	31	32	27	31	28	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	21,000 †m	18,000 †m	19,000 †m	20,000 †m	20,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	32	17	16	15	15	14	14	15	107	--	--	400	700	--
Magnesium	6,300	28,000	33,000	29,000	24,000	24,000	23,000	24,000	325,000	--	--	--	730,000	--
Manganese	460	460	450	360	320	310	320	320	630	636	--	1,600	4,100	--
Mercury	0.056	0.027	0.024	0.028	0.025	0.026	0.031	0.028	0.89	--	--	10	0.1	--
Nickel	20	38	33	34	36	36	35	35	100	--	--	1,600	4,100	--
Potassium	1,700	2,900	2,700	3,000	3,400	3,300	3,600	3,400	--	--	--	--	--	--
Selenium	0.42 J	0.57	ND U	0.35 J	ND U	ND U	0.64	0.37 J	1.3	--	--	390	1,000	--
Silver	0.19 J	0.17 J	0.13 J	0.13 J	0.19 J	0.19 J	0.27 J	0.29	4.4	--	--	390	1,000	--
Sodium	130	210	200	210	210	210	220	230	--	--	--	--	--	--
Thallium	0.50 J	0.42 J	0.47 J	0.46 J	0.59 J	0.50 J	0.73	0.57	2.6	--	--	6.3	160	--
Vanadium	27	18	16	19	22	21	23	23	550	--	--	550	1,400	--
Zinc	72	49	45	50	54	53	54	47	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)														
Barium	0.58	0.16 J	0.31 J	0.60	0.60	0.62	0.61	0.61	--	--	--	--	--	2
Boron	0.089 J	0.10 J	0.092 J	0.11 J	0.12 J	0.16 J	0.10 J	0.099 J	--	--	--	--	--	2
Cobalt	ND U	0.036	0.033	0.017 J	0.015 J	0.015 J	ND U	0.011 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Manganese	0.45 L	2.3 L	2.3 L	2.0 L	2.0 L	2.0 L	1.9 L	2.0 L	--	--	--	--	--	0.15
Nickel	ND U	0.084	0.082	0.038	0.032	0.030	0.032	0.035	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	ND U	ND U	0.083 J	0.023 J	--	--	--	--	--	5
SPLP Metals (mg/L)														
Manganese	0.15	0.14	0.039	0.022 J	0.045	0.099	0.17 L	0.17 L	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #2615V-118 (IDOT ROW)							Comparison Criteria					
	2615V-118-B35							MACs			TACO		
BORING	2615V-118-B35 (0-5)	2615V-118-B35 (5-10)	2615V-118-B35 (10-15)	2615V-118-B35 (15-23)	2615V-118-B35 (23-31)	2615V-118-B35 (31-39)	2615V-118-B35 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	15-23	23-31	31-39	39-47						
pH	8.0	8.1	8.2	7.5	7.8	8.1	8.1						
PID > Bkgd.	--	--	--	--	--	--	--						
VOCs (mg/kg)													
Acetone	ND U	0.019 J	ND U	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)													
2-Methylnaphthalene	0.027 J	0.033 J	0.036 J	0.031 J	0.028 J	0.034 J	0.031 J	--	--	--	--	--	--
Acenaphthene	0.019 J	0.042	0.015 J	0.048	0.052	ND U	0.0074 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.039	ND U	0.039	0.028 J	ND U	ND U	--	--	--	--	--	--
Anthracene	0.035 J	0.13	0.016 J	0.16	0.13	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.10	0.36	0.047	0.44	0.39	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.10 †	0.32 †	0.035 J	0.40 †	0.36 †	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.14	0.41	0.058	0.58	0.49	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.052	0.12	0.024 J	0.15	0.13	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.046	0.15	0.025 J	0.19	0.16	ND U	ND U	9	--	--	9	1,700	--
Chrysene	0.12	0.36	0.060	0.46	0.40	ND U	0.022 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.014 J	0.041	ND U	0.045	0.038 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.21	0.78	0.094	0.93	0.80	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.016 J	0.054	0.011 J	0.063	0.059	ND U	0.0061 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.045	0.13	0.019 J	0.15	0.14	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.018 J	0.037 J	0.021 J	0.034 J	0.033 J	ND U	ND U	1.8	--	--	170	1.8	--
N-Nitrosodiphenylamine	ND U	ND U	0.051 J	ND U	ND U	ND U	ND U	1	--	--	130	25,000	--
Phenanthrene	0.22	0.62	0.16	0.70	0.63	0.068	0.094	--	--	--	--	--	--
Pyrene	0.21	0.71	0.11	0.91	0.77	0.013 J	0.019 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)													
Antimony	0.25 J	0.27 J	ND U	0.31 J	ND U	ND U	0.29 J	5	--	--	31	82	--
Arsenic	7.3	7.7	8.6	7.4	8.0	7.0	8.1	11.3	13	--	13	61	--
Barium	45	630	37	45	44	41	38	1,500	--	--	5,500	14,000	--
Beryllium	0.68	0.78	0.80	0.78	0.79	0.81	0.80	22	--	--	160	410	--
Boron	17	20	22	21	21	23	20	40	--	--	16,000	41,000	--
Calcium	63,000	57,000	56,000	52,000	55,000	59,000	54,000	--	--	--	--	--	--
Chromium	15	23 †	17	17	18	19	17	21	--	--	230	690	--
Cobalt	12	12	14	14	15	13	14	20	--	--	4,700	12,000	--
Copper	33	68	34	41	29	26	29	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	19,000 †m	20,000 †m	19,000 †m	20,000 †m	19,000 †m	21,000 †m	15,000	15,900	--	--	--	--
Lead	55	42	20	41	15	14	15	107	--	--	400	700	--
Magnesium	28,000	24,000	25,000	23,000	23,000	25,000	24,000	325,000	--	--	--	730,000	--
Manganese	290	320	330	300	320	310	330	630	636	--	1,600	4,100	--
Mercury	0.050	0.24	0.040	0.10	0.026	0.022	0.025	0.89	--	--	10	0.1	--
Nickel	30	32	36	36	36	34	36	100	--	--	1,600	4,100	--
Potassium	2,800	3,500	3,700	3,500	3,800	3,800	3,400	--	--	--	--	--	--
Selenium	0.33 J	0.42 J	0.69	0.45 J	0.71	ND U	ND U	1.3	--	--	390	1,000	--
Silver	0.20 J	0.19 J	0.20 J	0.18 J	0.17 J	0.15 J	0.15 J	4.4	--	--	390	1,000	--
Sodium	290	220	200	200	240	250	210	--	--	--	--	--	--
Thallium	0.55	0.53 J	0.66	0.65	0.70	0.55 J	0.69	2.6	--	--	6.3	160	--
Vanadium	19	22	23	22	23	23	22	550	--	--	550	1,400	--
Zinc	79	78	52	71	52	58	53	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)													
Barium	0.37 J	0.40 J	0.53	0.45 J	0.49 J	0.57	0.59	--	--	--	--	--	2
Boron	0.11 J	0.12 J	0.11 J	0.11 J	0.11 J	0.12 J	0.14 J	--	--	--	--	--	2
Cobalt	0.032	0.029	0.022 J	0.026	0.027	0.019 J	0.019 J	--	--	--	--	--	1
Lead	0.010 L	0.014 L	ND U	0.011 L	0.0076 L	ND U	ND U	--	--	--	--	--	0.0075
Manganese	2.9 L	2.4 L	2.0 L	2.4 L	2.2 L	1.9 L	2.0 L	--	--	--	--	--	0.15
Nickel	0.054	0.062	0.059	0.054	0.061	0.041	0.043	--	--	--	--	--	0.1
SPLP Metals (mg/L)													
Manganese	ND U	0.027	0.025	0.027	0.027	0.068	0.35 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)						Comparison Criteria					
	2615V2-01-B21	2615V2-01-B22	2615V2-01-B24	2615V2-01-B25	2615V2-01-B26	2615V2-01-B27	MACs			TACO		
BORING	2615V2-01-B21 (0-4)	2615V2-01-B22 (0-7)	2615V2-01-B24 (0-4)	2615V2-01-B25 (0-7)	2615V2-01-B26 (0-7)	2615V2-01-B27 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-4	0-7	0-4	0-7	0-7	0-4						
pH	8.3	7.9	8.0	8.3	8.1	8.7						
PID > Bkd	--	--	--	--	--	--						
VOCs (mg/kg)												
2-Butanone (MEK)	ND U	ND U	ND U	ND U	ND U	0.0052 J	--	--	--	--	--	--
Acetone	ND U	0.017	0.01 J	ND U	ND U	0.034	25	--	--	70,000	100,000	--
Xylenes, Total	ND U	0.00062 J	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)												
2-Methylnaphthalene	0.46	0.033 J	0.023 J	0.027 J	0.043 J	0.14	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	0.17	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	0.087	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	ND U	0.4	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.031 J	ND U	ND U	0.032 J	ND U	0.77	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	ND U	0.78	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	ND U	ND U	ND U	0.98	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.022 J	0.014 J	ND U	ND U	ND U	0.33	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	0.36	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	ND U	0.16 J	46	--	--	46	4,100	--
Carbazole	ND U	ND U	ND U	ND U	ND U	0.19 J	0.6	--	--	32	6,200	--
Chrysene	ND U	0.033 J	0.036	ND U	0.022 J	0.94	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	0.082	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	ND U	0.21	--	--	--	--	--	--
Fluoranthene	ND U	0.015 J	ND U	0.01 J	ND U	1.5	3,100	--	--	3,100	82,000	--
Fluorene	0.013 J	ND U	ND U	ND U	ND U	0.27	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	0.29	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.098	ND U	ND U	ND U	ND U	0.33	1.8	--	--	170	1.8	--
Phenanthrene	0.19	0.13	0.12	0.093	0.095	1.7	--	--	--	--	--	--
Pyrene	0.019 J	0.031 J	ND U	0.018 J	ND U	2.2	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)												
Antimony	0.58 J	0.39 J	ND U	0.59 J	0.48 J	ND U	5	--	--	31	82	--
Arsenic	8	7.4	4.5	9.3	7	7.8	11.3	13	--	13	61	--
Barium	49	40	35	35	45	71	1,500	--	--	5,500	14,000	--
Beryllium	0.65	0.59	0.61	0.62	0.66	0.64	22	--	--	160	410	--
Boron	14	14	15	14	17	16	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	ND U	ND U	0.28	5.2	--	--	78	200	--
Calcium	60,000	64,000	54,000	61,000	58,000	59,000	--	--	--	--	--	--
Chromium	16	15	15	14	17	17	21	--	--	230	690	--
Cobalt	14	13	11	13	13	13	20	--	--	4,700	12,000	--
Copper	27	35	22	33	26	39	2,900	--	--	2,900	8,200	--
Iron	21,000 †m	19,000 †m	14,000	22,000 †m	20,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	14	14	12	15	19	140 †	107	--	--	400	700	--
Magnesium	24,000	27,000	22,000	26,000	24,000	24,000	325,000	--	--	--	730,000	--
Manganese	350	360	210	390	330	310	630	636	--	1,600	4,100	--
Mercury	0.019	0.019	0.012 J	0.016 J	0.014 J	0.062	0.89	--	--	10	0.1	--
Nickel	37	33	30	35	35	35	100	--	--	1,600	4,100	--
Potassium	3,100	2,500	2,800	2,600	3,200	2,700	--	--	--	--	--	--
Selenium	0.36 J	ND U	0.62	0.89	ND U	0.78	1.3	--	--	390	1,000	--
Silver	2.5	2	1.9	2.1	2.5	2	4.4	--	--	390	1,000	--
Sodium	1,000	870	1,400	870	1,200	1,100	--	--	--	--	--	--
Thallium	0.88	0.65	0.74	0.74	0.78	0.93	2.6	--	--	6.3	160	--
Vanadium	18	17	18	17	20	18	550	--	--	550	1,400	--
Zinc	52	48	36	48	57	100	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	0.65	0.8	0.56	0.6	0.6	0.39 J	--	--	--	--	--	2
Boron	ND U	0.1 J	0.07 J	0.1 J	0.08 J	0.12 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	ND U	0.0032 J	--	--	--	--	--	0.005
Cobalt	0.016 J	0.02 J	0.019 J	0.012 J	ND U	0.022 J	--	--	--	--	--	1
Iron	ND U	ND U	0.32 J	ND U	ND U	0.23 J	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	ND U	0.019 L	--	--	--	--	--	0.0075
Manganese	1.9 L	2 L	1.6 L	2 L	1.8 L	2.1 L	--	--	--	--	--	0.15
Nickel	0.045	0.055	0.033	0.033	0.028	0.034	--	--	--	--	--	0.1
SPLP Metals (mg/L)												
Manganese	0.072	0.24 L	0.039	0.037	0.093	ND U	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)							Comparison Criteria					
	2615V2-01-B28							MACs			TACO		
BORING	2615V2-01-B28 (0-5)	2615V2-01-B28 (5-10)	2615V2-01-B28 (10-15)	2615V2-01-B28 (15-23)	2615V2-01-B28 (23-31)	2615V2-01-B28 (31-39)	2615V2-01-B28 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE													
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	15-23	23-31	31-39	39-47						
pH	7.5	8.0	7.7	8.0	8.2	8.1	7.7						
PID > Bkd	--												
VOCs (mg/kg)													
Acetone	0.012	ND	ND	0.032	ND	ND	0.011	25	--	--	70,000	100,000	--
SVOCs (mg/kg)													
2-Methylnaphthalene	0.096	0.061	0.084	0.078	0.049	0.041	0.04	--	--	--	--	--	--
Acenaphthene	0.15	0.064	ND	0.014	ND	0.024	ND	570	--	--	4,700	120,000	--
Acenaphthylene	0.065	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--
Anthracene	0.48	0.065	ND	ND	ND	ND	ND	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	1.1	0.16	ND	ND	ND	ND	ND	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.94	0.16	ND	ND	ND	0.012	ND	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	1.5	0.077	ND	ND	ND	ND	ND	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.26	0.1	0.03	ND	ND	ND	0.025	--	--	--	--	--	--
Benzo(k)fluoranthene	0.58	0.22	ND	ND	ND	ND	ND	9	--	--	9	1,700	--
Carbazole	0.22	ND	ND	ND	ND	ND	ND	0.6	--	--	32	6,200	--
Chrysene	1.1	0.2	0.069	ND	0.04	0.04	0.035	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.11	0.023	ND	ND	ND	ND	ND	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	0.15	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--
Fluoranthene	2.4	0.37	0.041	ND	ND	0.011	ND	3,100	--	--	3,100	82,000	--
Fluorene	0.19	0.037	ND	0.013	ND	ND	0.0098	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.29	0.074	ND	ND	ND	ND	ND	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.1	0.047	ND	ND	ND	ND	ND	1.8	--	--	170	1.8	--
Phenanthrene	1.9	0.34	0.3	0.18	0.19	0.16	0.13	--	--	--	--	--	--
Pyrene	2.2	0.37	0.084	0.045	0.048	0.037	0.034	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)													
Antimony	0.28	0.35	ND	ND	ND	ND	0.3	5	--	--	31	82	--
Arsenic	9.2	4.5	8.1	7.2	6.8	7.4	7.5	11.3	13	--	13	61	--
Barium	82	56	36	38	40	41	40	1,500	--	--	5,500	14,000	--
Beryllium	0.59	0.38	0.67	0.64	0.66	0.7	0.7	22	--	--	160	410	--
Boron	15	12	18	18	19	21	18	40	--	--	16,000	41,000	--
Cadmium	0.43	0.21	0.24	0.18	0.17	0.19	0.17	5.2	--	--	78	200	--
Calcium	51,000	31,000	34,000	58,000	59,000	55,000	53,000	--	--	--	--	--	--
Chromium	15	9.8	16	16	17	18	17	21	--	--	230	690	--
Cobalt	12	7	14	13	13	14	14	20	--	--	4,700	12,000	--
Copper	42	15	31	26	24	27	26	2,900	--	--	2,900	8,200	--
Iron	18,000	10,000	19,000	18,000	19,000	20,000	20,000	15,000	15,900	--	--	--	--
Lead	99	77	17	13	13	14	14	107	--	--	400	700	--
Magnesium	20,000	16,000	19,000	24,000	22,000	22,000	24,000	325,000	--	--	--	730,000	--
Manganese	310	220	290	320	300	300	320	630	636	--	1,600	4,100	--
Mercury	0.12	0.089	0.019	0.015	0.015	0.018	0.018	0.89	--	--	10	0.1	--
Nickel	29	17	37	33	33	36	36	100	--	--	1,600	4,100	--
Potassium	2,300	1,600	3,200	3,100	3,200	3,400	3,200	--	--	--	--	--	--
Selenium	0.4	0.43	0.53	0.54	0.55	0.49	0.63	1.3	--	--	390	1,000	--
Silver	1.9	1.6	2.1	2.1	2.2	2.3	1.9	4.4	--	--	390	1,000	--
Sodium	420	310	180	180	190	210	200	--	--	--	--	--	--
Thallium	0.61	0.48	1.4	1	0.9	1.1	0.89	2.6	--	--	6.3	160	--
Vanadium	19	14	20	20	21	22	20	550	--	--	550	1,400	--
Zinc	110	49	53	53	52	56	60	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)													
Barium	0.28	0.56	0.52	0.59	0.61	0.62	0.61	--	--	--	--	--	2
Boron	0.098	0.12	0.083	0.08	0.1	0.11	0.11	--	--	--	--	--	2
Cadmium	0.0046	0.002	ND	ND	ND	ND	ND	--	--	--	--	--	0.005
Cobalt	0.014	0.022	0.027	0.02	0.014	0.016	0.017	--	--	--	--	--	1
Lead	0.016	0.018	ND	ND	ND	ND	ND	--	--	--	--	--	0.0075
Manganese	2.2	3.5	1.9	2	1.8	1.8	1.8	--	--	--	--	--	0.15
Nickel	0.027	0.037	0.067	0.048	0.037	0.04	0.043	--	--	--	--	--	0.1
Zinc	0.098	0.058	0.024	ND	0.17	0.029	ND	--	--	--	--	--	5
SPLP Metals (mg/L)													
Manganese	ND	0.048	0.037	0.033	0.08	0.09	0.072	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #2615V-118 (IDOT ROW)								Comparison Criteria					
	2615V-118-B07								MACs			TACO		
BORING	2615V-118-B07 (0-5)	2615V-118-B07 (5-10)	2615V-118-B07 (5-10)D	2615V-118-B07 (10-15)	2615V-118-B07 (15-23)	2615V-118-B07 (23-31)	2615V-118-B07 (31-39)	2615V-118-B07 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	2615V-118-B07 (0-5)	2615V-118-B07 (5-10)	2615V-118-B07 (5-10)D	2615V-118-B07 (10-15)	2615V-118-B07 (15-23)	2615V-118-B07 (23-31)	2615V-118-B07 (31-39)	2615V-118-B07 (39-47)						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	5-10	10-15	15-23	23-31	31-39	39-47						
pH	7.9	7.8	7.8	7.9	8.4	8.8	8.9	6.7						
PID > Bkgd.	--	--	--	--	--	--	--	--						
VOCs (mg/kg)														
Acetone	ND U	ND U	ND U	ND U	ND U	ND U	0.0099 J	0.0096 J	25	--	--	70,000	100,000	--
SVOCs (mg/kg)														
2-Methylnaphthalene	0.032 J	0.030 J	0.026 J	0.047 J	0.039 J	0.020 J	0.042 J	0.016 J	--	--	--	--	--	--
Acenaphthene	0.025 J	ND U	0.0070 J	0.0092 J	0.0089 J	ND U	0.012 J	0.012 J	570	--	--	4,700	120,000	--
Anthracene	0.081	ND U	ND U	ND U	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.22	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.23 †	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.40	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.077	ND U	ND U	ND U	ND U	ND U	ND U	0.013 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.14	ND U	ND U	ND U	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Chrysene	0.30	0.025 J	0.024 J	0.027 J	0.021 J	0.016 J	0.025 J	0.038 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.032 J	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.61	ND U	ND U	ND U	0.0083 J	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.049	ND U	ND U	0.0075 J	0.0080 J	0.0062 J	ND U	0.0092 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.095	ND U	ND U	ND U	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.015 J	ND U	0.011 J	0.015 J	0.012 J	0.0074 J	0.012 J	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.43	0.11	0.10	0.11	0.10	0.072	0.12	0.20	--	--	--	--	--	--
Pyrene	0.48	0.020 J	0.022 J	0.023 J	0.023 J	0.017 J	0.029 J	0.036 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)														
Antimony	ND U	0.30 J	0.28 J	ND U	0.27 J	ND U	ND U	0.23 J	5	--	--	31	82	--
Arsenic	8.7	9.1	8.1	10	7.4	7.5	7.3	13 †	11.3	13	--	13	61	--
Barium	31	34	35	37	44	44	48	26	1,500	--	--	5,500	14,000	--
Beryllium	0.82	0.85	0.74	0.81	0.81	0.81	0.87	0.55	22	--	--	160	410	--
Boron	20	22	21	21	23	24	24	14	40	--	--	16,000	41,000	--
Calcium	54,000	56,000	59,000	56,000	54,000	53,000	54,000	53,000	--	--	--	--	--	--
Chromium	17	18	17	17	19	19	20	13	21	--	--	230	690	--
Cobalt	16	15	13	14	15	15	15	17	20	--	--	4,700	12,000	--
Copper	36	31	32	33	30	33	32	43	2,900	--	--	2,900	8,200	--
Iron	21,000 †m	29,000 †m	21,000 †m	24,000 †m	21,000 †m	21,000 †m	22,000 †m	22,000 †m	15,000	15,900	--	--	--	--
Lead	24	17	15	16	14	14	15	21	107	--	--	400	700	--
Magnesium	22,000	20,000	26,000	26,000	23,000	23,000	23,000	26,000	325,000	--	--	--	730,000	--
Manganese	470	640 †m	340	370	320	330	340	380	630	636	--	1,600	4,100	--
Mercury	0.054	0.022	0.021	0.021	0.021	0.022	0.022	0.028	0.89	--	--	10	0.1	--
Nickel	39	38	32	36	36	36	38	37	100	--	--	1,600	4,100	--
Potassium	3,600	3,700	3,500	3,700	3,800	4,000	4,200	2,300	--	--	--	--	--	--
Selenium	ND U	0.43 J	0.64	ND U	ND U	ND U	ND U	0.40 J	1.3	--	--	390	1,000	--
Silver	0.17 J	0.23 J	0.19 J	0.15 J	0.12 J	0.17 J	0.18 J	0.23 J	4.4	--	--	390	1,000	--
Sodium	240	340	340	360	240	220	240	170	--	--	--	--	--	--
Thallium	0.65	ND U	ND U	0.48 J	0.50 J	0.46 J	0.37 J	1.2	2.6	--	--	6.3	160	--
Vanadium	22	25	22	22	24	24	25	17	550	--	--	550	1,400	--
Zinc	61	54	52	58	55	58	57	48	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)														
Barium	0.078 J	0.12 J	0.14 J	0.36 J	0.65	0.57	0.63	0.64	--	--	--	--	--	2
Boron	0.082 J	0.091 J	0.083 J	0.077 J	0.088 J	0.10 J	0.11 J	0.11 J	--	--	--	--	--	2
Cobalt	0.049	0.037	0.029	0.023 J	0.016 J	0.016 J	0.014 J	0.012 J	--	--	--	--	--	1
Iron	ND U	ND U	0.23 J	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Manganese	1.9 L	1.9 L	1.8 L	2.1 L	1.9 L	1.9 L	2.0 L	2.1 L	--	--	--	--	--	0.15
Nickel	0.086	0.077	0.082	0.051	0.037	0.032	0.029	0.051	--	--	--	--	--	0.1
SPLP Metals (mg/L)														
Manganese	ND U	0.070	0.059	0.046	0.023 J	0.15	0.27 L	0.25 L	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #2615V-118 (IDOT ROW)		Comparison Criteria						
	2615V-118-B31		MACs			TACO			
BORING	2615V-118-B31		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER	
SAMPLE	2615V-118-B31 (0-6)	2615V-118-B31 (6-12)							
MATRIX	Soil	Soil							
DEPTH (feet)	0-6	6-12							
pH	8.1	8.1							
PID > Bkgd.	--	--							
VOCs (mg/kg)									
Acetone	ND U	0.016 J	25	--	--	70,000	100,000	--	
SVOCs (mg/kg)									
2-Methylnaphthalene	0.019 J	0.043 J	--	--	--	--	--	--	
Acenaphthene	0.021 J	0.012 J	570	--	--	4,700	120,000	--	
Acenaphthylene	0.018 J	ND U	--	--	--	--	--	--	
Anthracene	0.070	ND U	12,000	--	--	23,000	610,000	--	
Benzo(a)anthracene	0.24	ND U	0.9	1.8	1.1	1.8	170	--	
Benzo(a)pyrene	0.25 †	ND U	0.09	2.1	1.3	2.1	17	--	
Benzo(b)fluoranthene	0.47	0.010 J	0.9	2.1	1.5	2.1	170	--	
Benzo(g,h,i)perylene	0.10	ND U	--	--	--	--	--	--	
Benzo(k)fluoranthene	0.18	ND U	9	--	--	9	1,700	--	
Chrysene	0.33	0.029 J	88	--	--	88	17,000	--	
Dibenz(a,h)anthracene	0.034 J	ND U	0.09	0.42	0.2	0.42	17	--	
Fluoranthene	0.62	0.011 J	3,100	--	--	3,100	82,000	--	
Fluorene	0.045	0.0070 J	560	--	--	3,100	82,000	--	
Indeno(1,2,3-cd)pyrene	0.12	ND U	0.9	1.6	0.9	1.6	170	--	
Naphthalene	0.015 J	0.015 J	1.8	--	--	170	1.8	--	
Phenanthrene	0.36	0.12	--	--	--	--	--	--	
Pyrene	0.50	0.027 J	2,300	--	--	2,300	61,000	--	
Inorganics (mg/kg)									
Antimony	0.31 J	ND U	5	--	--	31	82	--	
Arsenic	8.4	8.4	11.3	13	--	13	61	--	
Barium	63	37	1,500	--	--	5,500	14,000	--	
Beryllium	0.73	0.75	22	--	--	160	410	--	
Boron	14	18	40	--	--	16,000	41,000	--	
Calcium	40,000	50,000	--	--	--	--	--	--	
Chromium	19	17	21	--	--	230	690	--	
Cobalt	14	15	20	--	--	4,700	12,000	--	
Copper	44	37	2,900	--	--	2,900	8,200	--	
Iron	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--	
Lead	100	16	107	--	--	400	700	--	
Magnesium	19,000	23,000	325,000	--	--	--	730,000	--	
Manganese	320	330	630	636	--	1,600	4,100	--	
Mercury	0.075	0.022	0.89	--	--	10	0.1	--	
Nickel	34	37	100	--	--	1,600	4,100	--	
Potassium	2,900	3,400	--	--	--	--	--	--	
Selenium	0.39 J	ND U	1.3	--	--	390	1,000	--	
Silver	0.25 J	0.072 J	4.4	--	--	390	1,000	--	
Sodium	190	230	--	--	--	--	--	--	
Thallium	0.31 J	0.34 J	2.6	--	--	6.3	160	--	
Vanadium	22	20	550	--	--	550	1,400	--	
Zinc	110	47	5,100	--	--	23,000	61,000	--	
TCLP Metals (mg/L)									
Barium	0.35 J	0.32 J	--	--	--	--	--	2	
Boron	0.084 J	0.071 J	--	--	--	--	--	2	
Cobalt	0.024 J	0.038	--	--	--	--	--	1	
Manganese	1.8 L	1.8 L	--	--	--	--	--	0.15	
Nickel	0.033	0.083	--	--	--	--	--	0.1	
SPLP Metals (mg/L)									
Manganese	0.016 J	0.037	--	--	--	--	--	0.15	

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)				Comparison Criteria					
	2615V2-01-B30				MACs			TACO		
BORING	2615V2-01-B30 (0-6)	2615V2-01-B30 (6-12)	2615V2-01-B30 (12-18)	2615V2-01-B30 (12-18)D	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-18	12-18						
pH	7.3	7.2	7.3	7.5						
PID > Bkd	--									
VOCs (None Detect)										
SVOCs (mg/kg)										
2-Methylnaphthalene	0.046 J	0.055 J	0.052 J	0.049 J	--	--	--	--	--	--
Acenaphthene	0.027 J	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.04	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.079	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.071	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.072	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.027 J	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.057	ND U	ND U	ND U	9	--	--	9	1,700	--
Chrysene	0.1	0.039 J	ND U	ND U	88	--	--	88	17,000	--
Fluoranthene	0.16	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.032 J	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.026 J	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.065	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.27	0.17	0.13	0.12	--	--	--	--	--	--
Pyrene	0.18	ND U	0.023 J	0.02 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	0.45 J	0.6 J	0.28 J	0.45 J	5	--	--	31	82	--
Arsenic	8.1	4.9	7.8	7.3	11.3	13	--	13	61	--
Barium	47	33	37	39	1,500	--	--	5,500	14,000	--
Beryllium	0.85	0.49	0.64	0.72	22	--	--	160	410	--
Boron	17	14	15	16	40	--	--	16,000	41,000	--
Calcium	34,000	98,000	61,000	58,000	--	--	--	--	--	--
Chromium	18	14	16	17	21	--	--	230	690	--
Cobalt	15	7.9	14	14	20	--	--	4,700	12,000	--
Copper	35	18	39	29	2,900	--	--	2,900	8,200	--
Iron	20,000 †m	14,000	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	23	8	14	13	107	--	--	400	700	--
Magnesium	20,000	43,000	25,000	23,000	325,000	--	--	--	730,000	--
Manganese	310	260	360	320	630	636	--	1,600	4,100	--
Mercury	0.025	0.022	0.019	0.019 J	0.89	--	--	10	0.1	--
Nickel	39	20	35	36	100	--	--	1,600	4,100	--
Potassium	3,200	2,300	2,700	2,900	--	--	--	--	--	--
Selenium	0.37 J	0.37 J	0.44 J	0.64	1.3	--	--	390	1,000	--
Silver	2.5	2.1	2.2	2.4	4.4	--	--	390	1,000	--
Sodium	210	190	180	190	--	--	--	--	--	--
Thallium	0.92	0.54 J	0.84	1	2.6	--	--	6.3	160	--
Vanadium	20	16	18	19	550	--	--	550	1,400	--
Zinc	57	34	48	49	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.3 J	0.67	0.74	0.73	--	--	--	--	--	2
Boron	0.1 J	0.099 J	0.14 J	0.13 J	--	--	--	--	--	2
Cobalt	0.038	0.019 J	0.013 J	0.013 J	--	--	--	--	--	1
Iron	0.29 J	ND U	ND U	ND U	--	--	--	--	--	5
Manganese	2.5 L	2.3 L	2 L	2 L	--	--	--	--	--	0.15
Nickel	0.083	0.05	0.04	0.04	--	--	--	--	--	0.1
Selenium	ND U	ND U	0.02 J	ND U	--	--	--	--	--	0.05
Zinc	0.27 J	0.31 J	0.31 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	0.099	0.061	0.026	0.038	--	--	--	--	--	0.15

**PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN**

SITE	2615V2-1 (ROW)			Comparison Criteria					
	2615V2-01-B33	2615V2-01-B34		MACs			TACO		
BORING	2615V2-01-B33 (0-6)	2615V2-01-B34 (0-6)	2615V2-01-B34 (0-6)D	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	2615V2-01-B33 (0-6)	2615V2-01-B34 (0-6)	2615V2-01-B34 (0-6)D						
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-6	0-6	0-6						
pH	8.4	8.1	8.3						
PID > Bkd	--	--							
VOCs (None Detect)									
SVOCs (mg/kg)									
2-Methylnaphthalene	0.065 J	0.034 J	0.036 J	--	--	--	--	--	--
Benzo(g,h,i)perylene	ND U	0.022 J	0.027 J	--	--	--	--	--	--
Chrysene	ND U	0.022 J	0.036 J	88	--	--	88	17,000	--
N-Nitrosodiphenylamine	0.052 J	ND U	ND U	1	--	--	130	25,000	--
Phenanthrene	0.11	0.093	0.15	--	--	--	--	--	--
Pyrene	ND U	0.017 J	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	0.48 J	0.38 J	0.39 J	5	--	--	31	82	--
Arsenic	7.9	7.1	7.6	11.3	13	--	13	61	--
Barium	40	41	36	1,500	--	--	5,500	14,000	--
Beryllium	0.66	0.64	0.61	22	--	--	160	410	--
Boron	15	15	15	40	--	--	16,000	41,000	--
Calcium	61,000	59,000	66,000	--	--	--	--	--	--
Chromium	16	15	15	21	--	--	230	690	--
Cobalt	14	13	13	20	--	--	4,700	12,000	--
Copper	28	25	28	2,900	--	--	2,900	8,200	--
Iron	20,000 †m	20,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	14	13	14	107	--	--	400	700	--
Magnesium	26,000	24,000	27,000	325,000	--	--	--	730,000	--
Manganese	350	350	350	630	636	--	1,600	4,100	--
Mercury	0.017 J	0.017 J	0.016 J	0.89	--	--	10	0.1	--
Nickel	36	34	34	100	--	--	1,600	4,100	--
Potassium	2,900	2,900	2,800	--	--	--	--	--	--
Selenium	0.75	0.37 J	ND U	1.3	--	--	390	1,000	--
Silver	2.3	2.3	2.2	4.4	--	--	390	1,000	--
Sodium	610	870	1,400	--	--	--	--	--	--
Thallium	0.86	0.99	0.86	2.6	--	--	6.3	160	--
Vanadium	18	18	17	550	--	--	550	1,400	--
Zinc	50	51	47	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.57	0.67	0.61	--	--	--	--	--	2
Boron	0.082 J	0.11 J	0.081 J	--	--	--	--	--	2
Cobalt	0.01 J	0.01 J	0.011 J	--	--	--	--	--	1
Manganese	1.9 L	2 L	2.1 L	--	--	--	--	--	0.15
Nickel	0.029	0.03	0.031	--	--	--	--	--	0.1
SPLP Metals (mg/L)									
Manganese	0.05	0.024 J	0.029	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)					Comparison Criteria					
	2615V2-01-B38			2615V2-01-B39		MACs			TACO		
BORING	2615V2-01-B38 (0-5)			2615V2-01-B39 (0-4)		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	2615V2-01-B38 (0-5)	2615V2-01-B38 (5-10)	2615V2-01-B38 (10-15)	2615V2-01-B39 (0-4)	2615V2-01-B39 (4-8)						
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	0-4	4-8						
pH	8.0	7.4	7.7	8.0	7.6						
PID > Bkd	--			--							
VOCs (mg/kg)											
Acetone	0.058	ND U	ND U	0.017 J	ND U	25	--	--	70,000	100,000	--
Xylenes, Total	0.0011 J	ND U	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	0.027 J	0.048 J	0.04 J	0.046 J	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	0.033 J	0.015 J	570	--	--	4,700	120,000	--
Anthracene	0.0075 J	ND U	ND U	0.019 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	0.033 J	ND U	--	--	--	--	--	--
Chrysene	0.034 J	0.025 J	0.034 J	0.073	0.046	88	--	--	88	17,000	--
Fluoranthene	0.019 J	ND U	ND U	0.037	0.029 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.0065 J	ND U	ND U	560	--	--	3,100	82,000	--
Naphthalene	ND U	ND U	ND U	ND U	0.011 J	1.8	--	--	170	1.8	--
Phenanthrene	0.085	0.079	0.13	0.23	0.16	--	--	--	--	--	--
Pyrene	0.06	0.013 J	0.034 J	0.079	0.052	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Arsenic	5	7.2	7.6	6.8	8	11.3	13	--	13	61	--
Barium	31	45	41	40	38	1,500	--	--	5,500	14,000	--
Beryllium	0.61	0.68	0.8	0.87	0.83	22	--	--	160	410	--
Boron	17	20	23	21	21	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	0.06 J	0.069 J	5.2	--	--	78	200	--
Calcium	37,000	60,000	55,000	51,000	35,000	--	--	--	--	--	--
Chromium	15	18	19	19	19	21	--	--	230	690	--
Cobalt	8.8	13	14	15	15	20	--	--	4,700	12,000	--
Copper	25	28	31	27	31	2,900	--	--	2,900	8,200	--
Iron	16,000 †m	18,000 †m	24,000 †m	18,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	11	14	14	77 J	32 J	107	--	--	400	700	--
Magnesium	23,000	25,000	22,000	22,000	19,000	325,000	--	--	--	730,000	--
Manganese	210	350	300	270	270	630	636	--	1,600	4,100	--
Mercury	0.022	0.017 J	0.021	0.021	0.021	0.89	--	--	10	0.1	--
Nickel	29	33	37	40	40	100	--	--	1,600	4,100	--
Potassium	2,800	3,700	4,000	4,200	4,000	--	--	--	--	--	--
Selenium	0.52 J	0.7	0.88	0.79	0.99	1.3	--	--	390	1,000	--
Silver	2.3	2.6	2.6	2.6	2.6	4.4	--	--	390	1,000	--
Sodium	1,500	410	770	2,000	1,100	--	--	--	--	--	--
Thallium	0.78	0.94	1.1	1.2	1.2	2.6	--	--	6.3	160	--
Vanadium	17	22	25	23	23	550	--	--	550	1,400	--
Zinc	37	46	49	48	50	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.43 J	0.97	0.76	0.71	0.5	--	--	--	--	--	2
Boron	0.1 J	0.072 J	0.089 J	0.083 J	0.1 J	--	--	--	--	--	2
Cadmium	0.0022 J	0.0021 J	ND U	0.002 J	ND U	--	--	--	--	--	0.005
Cobalt	ND U	0.027	0.026	0.026	0.019 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	0.22 J	0.3 J	--	--	--	--	--	5
Manganese	0.88 L	2.5 L	2.1 L	2 L	1.9 L	--	--	--	--	--	0.15
Nickel	ND U	0.07	0.076	0.067	0.049	--	--	--	--	--	0.1
Zinc	0.21 J	ND U	0.24 J	ND UJ	ND UJ	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	ND U	0.057	0.23 L	0.13	0.015 J	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)			Comparison Criteria					
	2615V2-01-B40	2615V2-01-B42	2615V2-01-B43	MACs			TACO		
BORING	2615V2-01-B40 (0-6)	2615V2-01-B42 (0-7)	2615V2-01-B43 (0-7)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil						
MATRIX	0-6	0-7	0-7						
DEPTH (feet)	8.8	7.5	7.9						
pH	--	--	--						
PID > Bkd									
VOCs (mg/kg)									
Acetone	ND U	ND U	0.016 J	25	--	--	70,000	100,000	--
Xylenes, Total	ND U	ND U	0.00062 J	5.6	--	--	320	5.6	--
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	0.046 J	0.048 J	--	--	--	--	--	--
Acenaphthene	ND U	0.0082 J	ND U	570	--	--	4,700	120,000	--
Fluoranthene	ND U	0.008 J	ND U	3,100	--	--	3,100	82,000	--
Phenanthrene	0.18	0.16	0.12	--	--	--	--	--	--
Pyrene	ND U	0.04	0.025 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Arsenic	2.1	7.5	8.2	11.3	13	--	13	61	--
Barium	3.4	34	39	1,500	--	--	5,500	14,000	--
Beryllium	ND U	0.66	0.74	22	--	--	160	410	--
Boron	16	18	22	40	--	--	16,000	41,000	--
Cadmium	0.029 J	ND U	ND U	5.2	--	--	78	200	--
Calcium	180,000	56,000	68,000	--	--	--	--	--	--
Chromium	3.7	17	18	21	--	--	230	690	--
Cobalt	0.96	13	14	20	--	--	4,700	12,000	--
Copper	ND U	31	31	2,900	--	--	2,900	8,200	--
Iron	2,400	17,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	2.7	14	16	107	--	--	400	700	--
Magnesium	120,000	22,000	24,000	325,000	--	--	--	730,000	--
Manganese	84	320	340	630	636	--	1,600	4,100	--
Mercury	0.0062 J	0.027	0.03	0.89	--	--	10	0.1	--
Nickel	2	33	36	100	--	--	1,600	4,100	--
Potassium	750	3,200	3,700	--	--	--	--	--	--
Selenium	ND U	0.6 J	0.83	1.3	--	--	390	1,000	--
Silver	0.41	2.3	2.7	4.4	--	--	390	1,000	--
Sodium	450	800	1,900	--	--	--	--	--	--
Thallium	ND U	1	0.92	2.6	--	--	6.3	160	--
Vanadium	3.6	20	23	550	--	--	550	1,400	--
Zinc	7.9	48	57	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	ND U	0.71	0.59	--	--	--	--	--	2
Boron	0.068 J	0.11 J	0.067 J	--	--	--	--	--	2
Cadmium	ND U	0.0026 J	0.002 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	0.014 J	0.028	0.016 J	--	--	--	--	--	1
Iron	0.64	0.26 J	ND U	--	--	--	--	--	5
Manganese	0.26 L	2.8 L	1.9 L	--	--	--	--	--	0.15
Nickel	ND U	0.073	ND U	--	--	--	--	--	0.1
Zinc	ND UJ	0.21 J	0.3 J	--	--	--	--	--	5
SPLP Metals (mg/L)									
Manganese	ND U	0.046	0.069	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)					Comparison Criteria					
	2615V2-01-B44	2615V2-01-B45		2615V2-01-B46		MACs			TACO		
BORING	2615V2-01-B44 (0-4)	2615V2-01-B45 (0-4)	2615V2-01-B45 (4-8)	2615V2-01-B46 (0-4)	2615V2-01-B46 (4-8)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-4	0-4	4-8	0-4	4-8						
DEPTH (feet)	7.8	8.4	7.6	8.1	7.7						
pH	--	--	--	--	--						
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	ND U	0.014 J	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.035 J	0.0081 J	0.082	0.031 J	0.079 J	--	--	--	--	--	--
Acenaphthene	0.014 J	0.0066 J	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.0057 J	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	0.021 J	0.022 J	0.0078 J	0.01 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.055	0.12	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.059	0.13 †	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.052	0.18	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.02 J	0.024 J	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.09	0.1	ND U	ND U	ND U	9	--	--	9	1,700	--
Chrysene	0.084	0.14	0.039 J	0.033 J	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.013 J	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.11	0.23	0.01 J	0.016 J	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.0061 J	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.048	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.15	0.098	0.16	0.16	0.15	--	--	--	--	--	--
Pyrene	0.15	0.31	0.043	0.028 J	0.038 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Arsenic	8	4.7	8.1	8.2	10	11.3	13	--	13	61	--
Barium	39	12	39	31	42	1,500	--	--	5,500	14,000	--
Beryllium	0.69	0.26	0.74	0.72	0.72	22	--	--	160	410	--
Boron	20	18	21	19	21	40	--	--	16,000	41,000	--
Calcium	75,000	200,000	68,000	68,000	62,000	--	--	--	--	--	--
Chromium	17	5	18	16	19	21	--	--	230	690	--
Cobalt	13	7.3	14	13	14	20	--	--	4,700	12,000	--
Copper	30	5.5	30	34	31	2,900	--	--	2,900	8,200	--
Iron	18,000 †m	4,300	19,000 †m	18,000 †m	22,000 †m	15,000	15,900	--	--	--	--
Lead	22	15	16	18	16	107	--	--	400	700	--
Magnesium	29,000	110,000	23,000	26,000	23,000	325,000	--	--	--	730,000	--
Manganese	320	200	330	330	330	630	636	--	1,600	4,100	--
Mercury	0.039	0.0085 J	0.022	0.019	0.019 J	0.89	--	--	10	0.1	--
Nickel	33	11	35	34	37	100	--	--	1,600	4,100	--
Potassium	3,300	1,000	3,500	3,200	3,700	--	--	--	--	--	--
Selenium	0.63	0.55	0.45 J	0.79	0.73	1.3	--	--	390	1,000	--
Silver	2.3	0.64	2.5	2.3	2.7	4.4	--	--	390	1,000	--
Sodium	640	420	430	1,200	480	--	--	--	--	--	--
Thallium	0.68	ND U	0.92	0.87	1	2.6	--	--	6.3	160	--
Vanadium	21	6.1	22	19	23	550	--	--	550	1,400	--
Zinc	48	30	54	46	50	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.45 J	0.31 J	0.67	0.61	0.72	--	--	--	--	--	2
Boron	0.072 J	0.085 J	0.1 J	0.072 J	0.083 J	--	--	--	--	--	2
Cadmium	0.0027 J	0.002 J	0.002 J	ND U	ND U	--	--	--	--	--	0.005
Cobalt	0.021 J	0.01 J	0.017 J	0.019 J	0.013 J	--	--	--	--	--	1
Manganese	1.5 L	1.3 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Zinc	0.21 J	0.24 J	ND U	0.2 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.17 L	0.22 L	0.029	0.71 L	0.029	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)					Comparison Criteria					
	2615V2-01-B47			2615V2-01-B48	2615V2-01-B49	MACs			TACO		
BORING	2615V2-01-B47 (0-5)	2615V2-01-B47 (5-10)	2615V2-01-B47 (10-15)	2615V2-01-B48 (0-6)	2615V2-01-B49 (0-5)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	0-6	0-5						
pH	8.0	8.0	8.1	7.7	8.7						
PID > Bkd		--		--	--						
VOCs (mg/kg)											
Acetone	ND U	0.0087 J	ND U	0.034	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	ND U	ND U	0.03 J	0.02 J	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	0.022 J	0.014 J	570	--	--	4,700	120,000	--
Anthracene	ND U	ND U	ND U	ND U	0.033 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	ND U	ND U	ND U	0.091	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	0.1	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	ND U	ND U	0.096	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	0.04	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	0.099	9	--	--	9	1,700	--
Chrysene	ND U	0.027 J	0.033 J	0.037 J	0.12	88	--	--	88	17,000	--
Fluoranthene	0.014 J	ND U	ND U	ND U	0.19	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	0.016 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	0.041	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	0.013 J	1.8	--	--	170	1.8	--
Phenanthrene	0.1	0.098	0.11	0.14	0.17	--	--	--	--	--	--
Pyrene	ND U	0.014 J	ND U	0.023 J	0.22	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Arsenic	6.3	8.6	7.9	8.2	2.9	11.3	13	--	13	61	--
Barium	36	39	47	33	18	1,500	--	--	5,500	14,000	--
Beryllium	0.43	0.55	0.59	0.66	0.32	22	--	--	160	410	--
Boron	12	14	18	19	17	40	--	--	16,000	41,000	--
Calcium	80,000	62,000	60,000	66,000	170,000	--	--	--	--	--	--
Chromium	13	16	17	16	6.8	21	--	--	230	690	--
Cobalt	10	15	15	13	3.8	20	--	--	4,700	12,000	--
Copper	22	33	31	30	11	2,900	--	--	2,900	8,200	--
Iron	16,000 †m	20,000 †m	21,000 †m	18,000 †m	6,000	15,000	15,900	--	--	--	--
Lead	11	16	14	14	19	107	--	--	400	700	--
Magnesium	41,000	28,000	26,000	27,000	94,000	325,000	--	--	--	730,000	--
Manganese	340	420	370	320	180	630	636	--	1,600	4,100	--
Mercury	0.015 J	0.013 J	0.015 J	0.018 J	0.019	0.89	--	--	10	0.1	--
Nickel	27	39	38	33	9.9	100	--	--	1,600	4,100	--
Potassium	2,200	2,600	3,100	3,100	1,500	--	--	--	--	--	--
Selenium	0.61	0.87	1.1	1.1	ND U	1.3	--	--	390	1,000	--
Silver	2.1	2.7	3	2.3	0.95	4.4	--	--	390	1,000	--
Sodium	520	420	ND U	570	550	--	--	--	--	--	--
Thallium	0.74	0.88	1.2	0.83	ND U	2.6	--	--	6.3	160	--
Vanadium	14	18	20	20	8.7	550	--	--	550	1,400	--
Zinc	44	48	66	43	27	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.64	0.66	0.67	0.53	0.3 J	--	--	--	--	--	2
Boron	ND U	ND U	ND U	0.068 J	0.084 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	0.0022 J	--	--	--	--	--	0.005
Cobalt	0.027	0.019 J	0.017 J	0.016 J	0.011 J	--	--	--	--	--	1
Manganese	1.9 L	2.1 L	2.2 L	1.8 L	1.1 L	--	--	--	--	--	0.15
Nickel	0.069	0.052	0.045	ND U	ND U	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	0.29 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.043	0.03	0.029	0.044	ND U	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)							Comparison Criteria					
	2615V2-01-B51				2615V2-01-B52	2615V2-01-B53	2615V2-01-B54	MACs			TACO		
BORING	2615V2-01-B51 (0-5)	2615V2-01-B51 (5-10)	2615V2-01-B51 (10-15)	2615V2-01-B51 (15-20)	2615V2-01-B52 (0-6)	2615V2-01-B53 (0-6)	2615V2-01-B54 (0-4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	15-20	0-6	0-6	0-4						
pH	8.5	8.1	7.7	7.8	7.7	7.3	7.8						
PID > Bkd	--							--	--	--			
VOCs (mg/kg)													
Acetone	0.013 J	0.0074 J	0.0094 J	0.0095 J	ND U	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)													
2-Methylnaphthalene	0.056 J	0.063 J	0.064 J	0.07 J	ND U	0.081	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	ND U	ND U	0.03 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	ND U	ND U	0.02 J	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	ND U	ND U	0.12	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	ND U	ND U	ND U	ND U	0.031 J	0.38	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	ND U	ND U	0.42	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	ND U	ND U	ND U	ND U	0.54	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	ND U	0.015 J	ND U	0.17	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	ND U	0.33	9	--	--	9	1,700	--
Chrysene	0.04	0.032 J	0.037 J	0.03 J	0.042	0.069	0.44	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	ND U	0.058	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	0.045 J	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	ND U	ND U	ND U	ND U	0.058	0.74	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	ND U	ND U	0.039	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	ND U	0.17	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.15	0.14	0.18	0.15	0.2	0.24	0.56	--	--	--	--	--	--
Pyrene	0.03 J	0.027 J	ND U	ND U	0.018 J	0.088	1	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)													
Antimony	0.4 J	0.31 J	0.57 J	0.32 J	0.33 J	ND U	ND U	5	--	--	31	82	--
Arsenic	8.4	7.5	8.9	7.8	9	11	6.5	11.3	13	--	13	61	--
Barium	39	36	37	37	26	32	160	1,500	--	--	5,500	14,000	--
Beryllium	0.65	0.66	0.7	0.61	0.48	0.67	0.56	22	--	--	160	410	--
Boron	14	14	17	16	12	17	12	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	ND U	ND U	ND U	0.35	5.2	--	--	78	200	--
Calcium	55,000	57,000	53,000	54,000	65,000	28,000	71,000	--	--	--	--	--	--
Chromium	16	16	16	16	12	16	15	21	--	--	230	690	--
Cobalt	15	14	15	14	15	19	11	20	--	--	4,700	12,000	--
Copper	34	37	35	30	39	43	48	2,900	--	--	2,900	8,200	--
Iron	20,000 tm	19,000 tm	21,000 tm	19,000 tm	21,000 tm	21,000 tm	15,000	15,000	15,900	--	--	--	--
Lead	15	13	16	14	20	21	91	107	--	--	400	700	--
Magnesium	23,000	23,000	22,000	22,000	29,000	17,000	32,000	325,000	--	--	--	730,000	--
Manganese	320	330	320	320	520	280	280	630	636	--	1,600	4,100	--
Mercury	0.019	0.033	0.019 J	0.02	0.02	0.029	0.08	0.89	--	--	10	0.1	--
Nickel	38	36	39	36	39	51	30	100	--	--	1,600	4,100	--
Potassium	2,800	2,700	3,000	2,900	2,300	3,100	2,200	--	--	--	--	--	--
Selenium	ND U	0.45 J	0.55 J	ND U	0.61	0.68	0.83	1.3	--	--	390	1,000	--
Silver	2.3	2.3	2.4	2.3	1.8	1.9	1.9	4.4	--	--	390	1,000	--
Sodium	1,900	1,700	490	210	340	270	220	--	--	--	--	--	--
Thallium	1.1	0.93	0.83	0.84	0.8	1.6	0.71	2.6	--	--	6.3	160	--
Vanadium	18	18	19	19	14	20	17	550	--	--	550	1,400	--
Zinc	57	52	54	62	47	53	160	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)													
Barium	0.6	0.58	0.49 J	0.6	0.46 J	0.13 J	0.45 J	--	--	--	--	--	2
Boron	0.097 J	0.12 J	0.15 J	0.14 J	ND U	0.087 J	0.074 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	ND U	ND U	0.0025 J	--	--	--	--	--	0.005
Cobalt	0.022 J	0.012 J	0.011 J	0.011 J	0.025	0.059	ND U	--	--	--	--	--	1
Lead	ND U	ND U	ND U	ND U	ND U	ND U	0.014 L	--	--	--	--	--	0.0075
Manganese	2 L	2 L	1.8 L	2.1 L	1.9 L	2.3 L	0.47 L	--	--	--	--	--	0.15
Nickel	0.056	0.034	0.03	0.031	0.054	0.19 L	ND U	--	--	--	--	--	0.1
Zinc	0.23 J	ND U	ND U	0.32 J	0.02 J	ND UJ	0.28 J	--	--	--	--	--	5
SPLP Metals (mg/L)													
Lead	NA	NA	NA	NA	NA	NA	0.17 L	--	--	--	--	--	0.0075
Manganese	0.91 L	0.18 L	0.04	0.15	0.015 J	0.088	0.3 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE BORING	2615V2-1 (ROW)								Comparison Criteria					
	2615V2-01-B55								MACs			TACO		
SAMPLE	2615V2-01-B55 (0-5)	2615V2-01-B55 (5-10)	2615V2-01-B55 (10-15)	2615V2-01-B55 (15-23)	2615V2-01-B55 (23-31)	2615V2-01-B55 (23-31)D	2615V2-01-B55 (31-39)	2615V2-01-B55 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	15-23	23-31	23-31	31-39	39-47						
pH	8.1	8.1	7.9	8.2	8.0	8.1	7.8	7.9						
PID > Bkd	--													
VOCs (mg/kg)														
Acetone	ND	ND	ND	ND	ND	0.011	ND	ND	25	--	--	70,000	100,000	--
SVOCs (mg/kg)														
2-Methylnaphthalene	0.08	0.09	0.061	0.031	0.025	0.03	0.028	0.068	--	--	--	--	--	--
Acenaphthene	0.031	ND	ND	ND	ND	ND	0.023	ND	570	--	--	4,700	120,000	--
Anthracene	0.051	ND	ND	ND	ND	ND	ND	0.014	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.2	ND	ND	ND	ND	ND	ND	ND	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.27	0.013	0.008	ND	ND	ND	ND	ND	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.4	ND	ND	ND	ND	ND	ND	ND	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.1	ND	0.021	0.027	0.024	0.02	0.021	0.026	--	--	--	--	--	--
Benzo(k)fluoranthene	0.18	ND	ND	ND	ND	ND	ND	ND	9	--	--	9	1,700	--
Chrysene	0.28	0.041	ND	0.036	0.026	0.031	0.04	ND	88	--	--	88	17,000	--
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	0.043	--	--	--	--	--	--
Fluoranthene	0.44	0.02	ND	ND	ND	ND	ND	ND	3,100	--	--	3,100	82,000	--
Fluorene	0.043	0.01	ND	ND	ND	0.0059	ND	0.013	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.11	ND	ND	ND	ND	ND	ND	ND	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.034	ND	ND	ND	ND	ND	ND	ND	1.8	--	--	170	1.8	--
Phenanthrene	0.35	0.14	0.12	0.12	0.1	0.094	0.19	0.23	--	--	--	--	--	--
Pyrene	0.8	0.042	0.029	0.022	ND	0.022	0.035	0.046	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)														
Antimony	ND	ND	ND	ND	0.22	ND	ND	ND	5	--	--	31	82	--
Arsenic	6.8	8.3	7.6	6.9	7.8	6.9	12	11	11.3	13	--	13	61	--
Barium	30	37	41	39	38	45	20	23	1,500	--	--	5,500	14,000	--
Beryllium	0.62	0.7	0.68	0.65	0.69	0.74	0.47	0.53	22	--	--	160	410	--
Boron	19	18	19	17	18	20	12	14	40	--	--	16,000	41,000	--
Cadmium	0.17	0.23	0.18	0.16	0.18	0.16	0.27	0.28	5.2	--	--	78	200	--
Calcium	73,000	46,000	51,000	57,000	49,000	48,000	48,000	48,000	--	--	--	--	--	--
Chromium	14	18	17	16	17	18	10	13	21	--	--	230	690	--
Cobalt	12	15	13	13	14	14	16	15	20	--	--	4,700	12,000	--
Copper	24	33	29	24	29	26	43	34	2,900	--	--	2,900	8,200	--
Iron	17,000	21,000	20,000	19,000	20,000	20,000	20,000	20,000	15,000	15,900	--	--	--	--
Lead	14	16	14	14	16	13	19	18	107	--	--	400	700	--
Magnesium	40,000	21,000	23,000	23,000	24,000	22,000	24,000	25,000	325,000	--	--	--	730,000	--
Manganese	300	310	320	320	340	310	330	330	630	636	--	1,600	4,100	--
Mercury	0.016	0.016	0.016	0.016	0.016	0.015	0.021	0.019	0.89	--	--	10	0.1	--
Nickel	31	41	35	34	37	36	39	36	100	--	--	1,600	4,100	--
Potassium	3,000	3,200	3,300	3,100	3,300	3,500	1,900	2,300	--	--	--	--	--	--
Selenium	0.77	0.83	0.51	0.56	0.47	0.55	0.61	0.47	1.3	--	--	390	1,000	--
Silver	1.7	1.9	2	1.9	1.8	2.1	1.2	1.3	4.4	--	--	390	1,000	--
Sodium	730	300	210	210	210	220	200	170	--	--	--	--	--	--
Thallium	0.55	1.1	0.87	0.76	1.1	0.92	1.4	1.2	2.6	--	--	6.3	160	--
Vanadium	20	20	20	19	20	22	15	15	550	--	--	550	1,400	--
Zinc	46	71	52	55	53	53	51	68	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)														
Barium	0.45	0.6	0.61	0.62	0.59	0.6	0.35	0.39	--	--	--	--	--	2
Boron	0.16	0.12	0.097	0.12	0.11	0.11	0.074	0.093	--	--	--	--	--	2
Cobalt	0.014	0.019	0.016	0.015	0.018	0.017	0.039	0.042	--	--	--	--	--	1
Manganese	1.5	1.8	1.8	1.9	2	1.9	1.8	1.8	--	--	--	--	--	0.15
Nickel	0.05	0.052	0.047	0.044	0.052	0.047	0.087	0.092	--	--	--	--	--	0.1
Zinc	0.18	0.14	0.077	0.18	0.18	0.031	0.18	0.08	--	--	--	--	--	5
SPLP Metals (mg/L)														
Manganese	0.015	0.024	0.035	0.11	0.15	0.24	0.021	0.059	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)								Comparison Criteria									
	2615V2-01-B56	2615V2-01-B57							MACs			TACO						
SAMPLE	2615V2-01-B56 (0-5)	2615V2-01-B57 (0-5)	2615V2-01-B57 (5-10)	2615V2-01-B57 (10-15)	2615V2-01-B57 (15-23)	2615V2-01-B57 (23-31)	2615V2-01-B57 (31-39)	2615V2-01-B57 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER				
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil										
DEPTH (feet)	0-5	0-5	5-10	10-15	15-23	23-31	31-39	39-47										
pH	8.6	7.6	7.4	7.2	7.8	7.9	7.9	7.6										
PID > Bkd	--																	
VOCs (mg/kg)																		
Acetone	ND	U	ND	ND	0.035	0.0078	0.0094	0.008	0.027	25	--	--	70,000	100,000	--			
SVOCs (mg/kg)																		
2-Methylnaphthalene	ND	U	0.19	0.035	0.051	0.061	0.026	0.024	0.0097	--	--	--	--	--	--			
Acenaphthene	ND	U	0.34	0.019	0.015	ND	ND	ND	0.039	570	--	--	4,700	120,000	--			
Acenaphthylene	ND	U	0.028	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--			
Anthracene	ND	U	0.81	ND	ND	ND	ND	ND	ND	12,000	--	--	23,000	610,000	--			
Benzo(a)anthracene	ND	U	1.6	†	ND	ND	ND	ND	ND	0.9	1.8	1.1	1.8	170	--			
Benzo(a)pyrene	ND	U	1.4	†	ND	ND	ND	ND	ND	0.09	2.1	1.3	2.1	17	--			
Benzo(b)fluoranthene	ND	U	2	†	ND	ND	ND	ND	ND	0.9	2.1	1.5	2.1	170	--			
Benzo(g,h,i)perylene	ND	U	0.51	ND	0.02	ND	ND	ND	ND	--	--	--	--	--	--			
Benzo(k)fluoranthene	ND	U	0.8	ND	ND	ND	ND	ND	ND	9	--	--	9	1,700	--			
Bis(2-ethylhexyl) phthalate	ND	U	0.12	ND	ND	ND	ND	ND	ND	46	--	--	46	4,100	--			
Carbazole	ND	U	0.54	ND	ND	ND	ND	ND	ND	0.6	--	--	32	6,200	--			
Chrysene	ND	U	1.6	0.037	ND	0.024	ND	0.015	0.018	88	--	--	88	17,000	--			
Dibenz(a,h)anthracene	ND	U	0.18	†	ND	ND	ND	ND	ND	0.09	0.42	0.2	0.42	17	--			
Dibenzofuran	ND	U	0.33	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--			
Fluoranthene	ND	U	4.1	ND	ND	ND	ND	ND	ND	3,100	--	--	3,100	82,000	--			
Fluorene	ND	U	0.42	ND	ND	ND	ND	ND	ND	560	--	--	3,100	82,000	--			
Indeno(1,2,3-cd)pyrene	ND	U	0.46	ND	ND	ND	ND	ND	ND	0.9	1.6	0.9	1.6	170	--			
Naphthalene	ND	U	0.49	ND	ND	ND	ND	ND	ND	1.8	--	--	170	1.8	--			
Phenanthrene	ND	U	3.4	0.15	0.11	0.13	0.058	0.051	0.18	--	--	--	--	--	--			
Pyrene	ND	U	3.4	0.031	0.024	0.029	0.012	0.012	0.033	2,300	--	--	2,300	61,000	--			
Inorganics (mg/kg)																		
Arsenic	0.47	J	4.9	6.1	7	6.9	7.3	6.4	12	†	11.3	13	--	13	61	--		
Barium	1.2		64	41	43	40	44	42	16		1,500	--	--	5,500	14,000	--		
Beryllium	ND	U	0.65	0.79	0.73	0.73	0.67	0.66	0.31		22	--	--	160	410	--		
Boron	7.2		16	17	19	18	19	19	9.1		40	--	--	16,000	41,000	--		
Cadmium	ND	U	0.35	0.14	0.18	0.13	0.19	0.13	0.24		5.2	--	--	78	200	--		
Calcium	220,000		68,000	30,000	52,000	57,000	48,000	49,000	68,000		--	--	--	--	--	--		
Chromium	ND	U	18	18	17	17	16	16	7.9		21	--	--	230	690	--		
Cobalt	0.56		8.9	13	12	12	12	12	12		20	--	--	4,700	12,000	--		
Copper	0.82		34	24	25	26	27	25	37		2,900	--	--	2,900	8,200	--		
Iron	1,200		15,000	19,000	†m	19,000	†m	20,000	†m	19,000	†m	17,000	†m	17,000	†m	15,000	15,900	--
Lead	1.4		42	12	12	12	12	12	17		107	--	--	400	700	--		
Magnesium	140,000	J	33,000	21,000	22,000	25,000	22,000	22,000	34,000		325,000	--	--	--	730,000	--		
Manganese	100		280	300	320	450	310	320	440		630	636	--	1,600	4,100	--		
Mercury	ND	U	0.032	0.0074	0.01	0.011	0.012	0.011	0.02		0.89	--	--	10	0.1	--		
Nickel	0.39	J	24	35	31	32	32	31	27		100	--	--	1,600	4,100	--		
Potassium	180		2,800	4,000	3,900	3,700	4,000	3,800	1,600		--	--	--	--	--	--		
Selenium	0.51		0.65	0.63	0.57	0.48	0.59	0.53	0.66		1.3	--	--	390	1,000	--		
Silver	0.21	J	1.8	2.2	2.1	1.9	2	2	1.1		4.4	--	--	390	1,000	--		
Sodium	470		330	290	260	220	230	230	160		--	--	--	--	--	--		
Thallium	ND	U	0.63	1.1	0.89	0.86	1	1	1.2		2.6	--	--	6.3	160	--		
Vanadium	0.65		18	20	21	20	21	20	11		550	--	--	550	1,400	--		
Zinc	1.7		100	48	48	48	53	47	42		5,100	--	--	23,000	61,000	--		
TCLP Metals (mg/L)																		
Barium	ND	U	0.24	0.2	0.5	0.48	0.49	0.66	0.32		--	--	--	--	--	2		
Boron	ND	U	0.072	0.088	0.073	0.096	0.081	1.3	1.2		--	--	--	--	--	2		
Cobalt	ND	U	ND	0.028	0.011	ND	ND	ND	0.039		--	--	--	--	--	1		
Iron	0.55		ND	ND	0.33	ND	ND	ND	ND		--	--	--	--	--	5		
Manganese	0.25	L	0.6	L	1.6	L	1.3	L	1.4	L	1.6	L	1.9	L	--	0.15		
Nickel	ND	U	ND	0.055	0.03	0.02	0.02	0.026	0.074		--	--	--	--	--	0.1		
Zinc	0.021	J	0.048	0.024	ND	0.034	0.072	0.11	0.25		--	--	--	--	--	5		
SPLP Metals (mg/L)																		
Manganese	ND	U	ND	0.034	0.023	0.056	0.18	L	0.19	L	0.013	--	--	--	--	0.15		

CONTAMINANTS OF CONCERN

SITE	2615V2-1 (ROW)				2615V2-1 (ROW)				Comparison Criteria					
	2615V2-01-B58	2615V2-01-B59	2615V2-01-B60	2615V2-01-B60 (5-11)	2615V2-01-B61	2615V2-01-B62	2615V2-01-B63	2615V2-01-B64	MACs			TACO		
SAMPLE	2615V2-01-B58 (0-7)	2615V2-01-B59 (0-7)	2615V2-01-B60 (0-5)	2615V2-01-B60 (5-11)	2615V2-01-B61 (0-5)	2615V2-01-B62 (0-5)	2615V2-01-B63 (0-5)	2615V2-01-B64 (0-6)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil							
DEPTH (feet)	0-7	0-7	0-5	5-11	0-5	0-5	0-5	0-6						
pH	7.8	7.8	8.1	8.5	8.2	8.9	8.0	8.5						
PID > Bkd	--	--	--	--	--	--	--	--						
VOCs (mg/kg)														
Acetone	ND U	0.0095 J	0.082	ND U	0.019 J	0.017 J	ND U	0.0086 J	25	--	--	70,000	100,000	--
Xylenes, Total	ND U	ND U	ND U	ND U	0.00077 J	0.00071 J	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)														
2-Methylnaphthalene	0.029 J	0.014 J	0.16	ND U	ND U	0.14	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	0.029 J	ND U	ND U	0.035	ND U	ND U	570	--	--	4,700	120,000	--
Anthracene	ND U	ND U	0.041	ND U	0.018 J	0.045	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.037	0.026 J	0.11	ND U	0.029 J	0.15	0.0087 J	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	ND U	ND U	ND U	ND U	0.17	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	ND U	ND U	ND U	ND U	0.25	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.017 J	ND U	ND U	ND U	ND U	0.042	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	ND U	ND U	0.19	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	0.12 J	ND U	ND U	0.11 J	ND U	ND U	46	--	--	46	4,100	--
Chrysene	ND U	ND U	0.28	ND U	0.046	0.24	0.041	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	ND U	ND U	0.021 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	ND U	ND U	0.4	ND U	0.054	0.36	0.019 J	ND U	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.041	ND U	ND U	0.039	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	ND U	ND U	ND U	0.1	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	0.029 J	ND U	ND U	0.03 J	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.17	0.079	0.3	ND U	0.15	0.31	0.18	ND U	--	--	--	--	--	--
Pyrene	0.021 J	0.017 J	0.76	ND U	0.065	0.68	0.034 J	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)														
Antimony	0.45 J	0.56 J	ND U	ND U	ND U	ND U	ND U	0.36 J	5	--	--	31	82	--
Arsenic	8.7	5.1	0.98	0.36 J	6.5	0.79	5.8	0.41 J	11.3	13	--	13	61	--
Barium	30	41	15	1.6	56	6.4	68	1	1,500	--	--	5,500	14,000	--
Beryllium	0.53	0.59	0.12 J	0.08 J	0.76	0.18 J	0.82	0.052 J	22	--	--	160	410	--
Boron	11	15	13	7.6	20	16	20	7.9	40	--	--	16,000	41,000	--
Calcium	62,000	64,000	190,000	230,000	30,000	190,000	33,000	210,000	--	--	--	--	--	--
Chromium	12	16	22	†	20	6.2	22	†	21	--	--	230	690	--
Cobalt	13	12	1.4	0.62	16	1.2	17	0.63 J	20	--	--	4,700	12,000	--
Copper	33	25	5.4	ND U	31	2.6	29	ND U	2,900	--	--	2,900	8,200	--
Iron	19,000	†m	17,000	†m	4,200	990	22,000	†m	2,500	22,000	†m	1,500	15,000	15,900
Lead	17	19	6.1	1.1	18	4.5	14	1.6	107	--	--	400	700	--
Magnesium	28,000	28,000	110,000 J	140,000 J	18,000	120,000 J	20,000	130,000 J	325,000	--	--	--	730,000	--
Manganese	380	350	230	96	290	200	300	94	630	636	--	1,600	4,100	--
Mercury	0.024	0.015 J	ND U	ND U	0.018	ND U	0.016 J	ND U	0.89	--	--	10	0.1	--
Nickel	34	32	4.3	0.18 J	46	3.9	47	4	100	--	--	1,600	4,100	--
Potassium	2,200	3,100	490	170	3,800	640	3,800	230	--	--	--	--	--	--
Selenium	ND U	0.45 J	0.9	0.38 J	0.74	0.42 J	0.88	ND U	1.3	--	--	390	1,000	--
Silver	1.8	2.4	0.98	0.25 J	3.4	1.4	3.6	ND U	4.4	--	--	390	1,000	--
Sodium	460	630	420	ND U	2,100	270	2,500	240	--	--	--	--	--	--
Thallium	0.7	0.54 J	ND U	ND U	1.2	ND U	1.3	ND U	2.6	--	--	6.3	160	--
Vanadium	13	18	8	0.65	22	9	24	0.66	550	--	--	550	1,400	--
Zinc	52	53	25	1.6	56	13	55	ND U	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)														
Barium	0.61	0.71	0.41 J	ND U	0.77	0.061 J	0.7	ND U	--	--	--	--	--	2
Cobalt	0.018 J	0.019 J	ND U	ND U	0.035	ND U	0.057	ND U	--	--	--	--	--	1
Iron	0.2 J	0.36 J	ND U	0.44	ND U	1.5	ND U	1.6	--	--	--	--	--	5
Manganese	1.9	L	2.5	L	1.4	L	0.24	L	2.2	L	1	L	2.5	L
Nickel	0.041	0.044	ND U	ND U	0.078	ND U	0.14	L	ND U	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	ND U	ND U	ND U	0.021 J	ND U	--	--	--	--	--	0.05
Zinc	ND U	0.037 J	0.1 J	ND U	0.037 J	ND U	0.029 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)														
Manganese	0.015 J	0.026	ND U	ND U	1.3	L	ND U	0.43	L	ND U	--	--	--	0.15
Nickel	NA	NA	NA	NA	NA	NA	0.091	NA	--	--	--	--	--	0.1

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B01					MACs			TACO		
BORING	2615V2-AI-B01 (0-6)	2615V2-AI-B01 (6-12)	2615V2-AI-B01 (12-18)	2615V2-AI-B01 (18-24)	2615V2-AI-B01 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.7	7.7	7.9	7.9	7.9						
pH			--								
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	ND U	ND U	0.01 J	ND U	25	--	--	70,000	100,000	--
Trichloroethene	ND U	ND U	ND U	0.00072 J	0.00079 J	0.06	--	--	5	12	--
Xylenes, Total	ND U	ND U	ND U	0.0014 J	0.0014 J	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	ND U	0.054 J	0.047 J	0.04 J	--	--	--	--	--	--
Benzo(g,h,i)perylene	ND UJ	ND U	ND U	0.017 J	0.016 J	--	--	--	--	--	--
Chrysene	0.026 J	0.044	0.026 J	ND U	0.021 J	88	--	--	88	17,000	--
Phenanthrene	0.11	0.19	0.11	0.11	0.097	--	--	--	--	--	--
Pyrene	ND U	ND U	0.027 J	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Arsenic	5.8 J	8	7.2	7.2	7.3	11.3	13	--	13	61	--
Barium	36	38	44	39	42	1,500	--	--	5,500	14,000	--
Beryllium	0.7	0.86	0.77	0.69	0.74	22	--	--	160	410	--
Boron	17	21	23	19	22	40	--	--	16,000	41,000	--
Calcium	23,000 J	34,000	55,000	70,000	53,000	--	--	--	--	--	--
Chromium	17 J	19	19	17	18	21	--	--	230	690	--
Cobalt	13	15	14	13	14	20	--	--	4,700	12,000	--
Copper	29	33	27	25	26	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	20,000 †m	26,000 †m	27,000 †m	25,000 †m	15,000	15,900	--	--	--	--
Lead	11 J	16	14	13	14	107	--	--	400	700	--
Magnesium	16,000 J	20,000 J	23,000 J	26,000 J	22,000 J	325,000	--	--	--	730,000	--
Manganese	230	300	310	370	310	630	636	--	1,600	4,100	--
Mercury	0.023	0.023	0.02	0.019 J	0.019	0.89	--	--	10	0.1	--
Nickel	37	42	37	35	37	100	--	--	1,600	4,100	--
Potassium	3,400	3,800	3,900	3,200	3,700	--	--	--	--	--	--
Selenium	0.92 J	0.95	0.88	0.82	0.94	1.3	--	--	390	1,000	--
Silver	2.4	2.6	3	2.4	2.7	4.4	--	--	390	1,000	--
Sodium	1,400 J	450	200	190	210	--	--	--	--	--	--
Thallium	1.1 J	1.3	1.1	0.92	1.1	2.6	--	--	6.3	160	--
Vanadium	20	23	24	21	23	550	--	--	550	1,400	--
Zinc	48 J	55	53	52	56	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.78	0.66	0.77	0.76	0.74	--	--	--	--	--	2
Boron	0.11 J	0.11 J	0.11 J	0.12 J	0.16 J	--	--	--	--	--	2
Cadmium	0.003 J	ND U	ND U	ND U	0.0021 J	--	--	--	--	--	0.005
Cobalt	0.042	0.023 J	0.012 J	0.016 J	0.014 J	--	--	--	--	--	1
Iron	ND U	0.21 J	ND U	0.24 J	0.34 J	--	--	--	--	--	5
Manganese	2.5 L	1.9 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.063	0.058	0.035	0.036	0.039	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	1.2 L	0.033	0.028	0.043	0.063	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B02					MACs			TACO		
BORING	2615V2-AI-B02 (0-6)	2615V2-AI-B02 (6-12)	2615V2-AI-B02 (12-18)	2615V2-AI-B02 (18-24)	2615V2-AI-B02 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	7.8	7.9	7.8	7.6	7.4						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	0.0079 J	0.015 J	0.018	0.019	25	--	--	70,000	100,000	--
Trichloroethene	ND U	ND U	0.0007 J	ND U	ND U	0.06	--	--	5	12	--
Xylenes, Total	0.00079 J	ND U	0.0014 J	0.00086 J	0.0015 J	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.051 J	0.046 J	0.045 J	0.047 J	0.049 J	--	--	--	--	--	--
Benzo(g,h,i)perylene	0.015 J	0.015 J	0.016 J	0.027 J	ND U	--	--	--	--	--	--
Chrysene	0.032 J	ND U	0.023 J	0.03 J	ND U	88	--	--	88	17,000	--
Fluorene	ND U	ND U	ND U	ND U	0.0099 J	560	--	--	3,100	82,000	--
Phenanthrene	0.14	0.17	0.099	0.1	0.11	--	--	--	--	--	--
Inorganics (mg/kg)											
Arsenic	8.2	8.5	7.2	7.6	7.3	11.3	13	--	13	61	--
Barium	38	34	40	40	41	1,500	--	--	5,500	14,000	--
Beryllium	0.9	0.89	0.75	0.73	0.75	22	--	--	160	410	--
Boron	21	21	18	19	21	40	--	--	16,000	41,000	--
Calcium	26,000	28,000	56,000	57,000	50,000	--	--	--	--	--	--
Chromium	20	19	18	18	18	21	--	--	230	690	--
Cobalt	17	16	13	14	14	20	--	--	4,700	12,000	--
Copper	35	32	26	28	26	2,900	--	--	2,900	8,200	--
Iron	22,000 †m	20,000 †m	25,000 †m	27,000 †m	23,000 †m	15,000	15,900	--	--	--	--
Lead	17	16	14	22	14	107	--	--	400	700	--
Magnesium	17,000 J	17,000 J	23,000 J	23,000 J	22,000	325,000	--	--	--	730,000	--
Manganese	280	280	310	310	300	630	636	--	1,600	4,100	--
Mercury	0.023	0.026	0.021	0.02	0.021	0.89	--	--	10	0.1	--
Nickel	47	44	36	38	37	100	--	--	1,600	4,100	--
Potassium	4,100	3,900	3,200	3,400	3,600	--	--	--	--	--	--
Selenium	0.99	1	0.98	0.85	1.1	1.3	--	--	390	1,000	--
Silver	2.6	2.6	2.6	2.6	2.7	4.4	--	--	390	1,000	--
Sodium	1,200	1,100	220	190	200	--	--	--	--	--	--
Thallium	1.4	1.3	1.1	0.69	1	2.6	--	--	6.3	160	--
Vanadium	25	24	21	22	23	550	--	--	550	1,400	--
Zinc	57	55	51	62	53	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.74	0.73	0.8	0.74	0.71	--	--	--	--	--	2
Boron	0.091 J	0.087 J	0.098 J	0.11 J	0.12 J	--	--	--	--	--	2
Cobalt	0.031	0.031	0.017 J	0.013 J	0.014 J	--	--	--	--	--	1
Iron	ND U	ND U	0.24 J	ND U	0.22 J	--	--	--	--	--	5
Manganese	2.4 L	2.3 L	1.9 L	1.9 L	1.9 L	--	--	--	--	--	0.15
Nickel	0.066	0.076	0.044	0.036	0.036	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	0.26 L	0.073	0.033	0.037	0.08	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B04					MACs			TACO		
BORING	2615V2-AI-B04 (0-6)	2615V2-AI-B04 (6-12)	2615V2-AI-B04 (12-18)	2615V2-AI-B04 (18-24)	2615V2-AI-B04 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.1	7.6	7.5	7.7	7.4						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	0.04	ND U	ND U	0.0079 J	25	--	--	70,000	100,000	--
Xylenes, Total	ND U	ND U	ND U	ND U	0.00091 J	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	0.048 J	0.032 J	0.045 J	0.048 J	--	--	--	--	--	--
Benzo(a)anthracene	ND U	ND U	ND U	0.025 J	0.022 J	0.9	1.8	1.1	1.8	170	--
Bis(2-ethylhexyl) phthalate	0.088 J	ND U	ND U	0.089 J	ND U	46	--	--	46	4,100	--
Chrysene	0.028 J	0.036 J	0.02 J	ND U	ND U	88	--	--	88	17,000	--
Phenanthrene	0.098	0.15	0.063	0.1	0.1	--	--	--	--	--	--
Pyrene	0.013 J	0.022 J	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.35 J	0.64 J	0.45 J	0.53 J	0.49 J	5	--	--	31	82	--
Arsenic	8.6	9.8	7.6	8.1	7.6	11.3	13	--	13	61	--
Barium	41	30	39	37	39	1,500	--	--	5,500	14,000	--
Beryllium	0.77	0.64	0.71	0.7	0.77	22	--	--	160	410	--
Boron	15	14	17	16	17	40	--	--	16,000	41,000	--
Calcium	29,000	40,000	52,000	54,000	53,000	--	--	--	--	--	--
Chromium	18	16	18	15	16	21	--	--	230	690	--
Cobalt	14	16	14	15	14	20	--	--	4,700	12,000	--
Copper	36	38	28	31	29	2,900	--	--	2,900	8,200	--
Iron	22,000 †m	20,000 †m	20,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	16	17	14	15	14	107	--	--	400	700	--
Magnesium	17,000	19,000	23,000	23,000	21,000	325,000	--	--	--	730,000	--
Manganese	270	310	330	330	330	630	636	--	1,600	4,100	--
Nickel	40	41	37	38	36	100	--	--	1,600	4,100	--
Potassium	2,900	2,500	2,900	3,000	3,300	--	--	--	--	--	--
Selenium	0.72	0.62	0.78	0.97	0.54 J	1.3	--	--	390	1,000	--
Silver	2.8	2.2	2.4	2.2	2.4	4.4	--	--	390	1,000	--
Sodium	520	340	170	200	210	--	--	--	--	--	--
Thallium	1	1.1	0.77	0.87	0.67	2.6	--	--	6.3	160	--
Vanadium	20	19	20	20	21	550	--	--	550	1,400	--
Zinc	53	50	53	54	49	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.46 J	0.48 J	0.71	0.64	0.66	--	--	--	--	--	2
Boron	0.062 J	0.065 J	0.11 J	0.085 J	0.089 J	--	--	--	--	--	2
Cadmium	0.0022 J	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Cobalt	0.024 J	0.044	0.014 J	0.017 J	0.014 J	--	--	--	--	--	1
Manganese	2.6 L	2.3 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.04	0.1	0.043	0.048	0.039	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	0.021 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	ND U	0.03	0.015 J	0.019 J	0.017 J	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B05					MACs			TACO		
BORING	2615V2-AI-B05 (0-6)	2615V2-AI-B05 (6-12)	2615V2-AI-B05 (6-12)D	2615V2-AI-B05 (12-18)	2615V2-AI-B05 (18-24)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	6-12	12-18	18-24						
DEPTH (feet)	8.3	8.1	7.9	8.3	8.4						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	0.0082 J	0.0089 J	ND U	0.029	ND U	25	--	--	70,000	100,000	--
Vinyl chloride	0.0055	ND U	ND U	ND U	ND U	0.01	--	--	0.28	1.1	--
SVOCs (mg/kg)											
Naphthalene	ND U	ND U	ND U	ND U	0.0078 J	1.8	--	--	170	1.8	--
Phenanthrene	0.12	0.15	0.15	0.088	0.086	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.8 J	0.61 J	0.76 J	0.83 J	0.52 J	5	--	--	31	82	--
Arsenic	8.7 J	5.6	9.3	7.6	7.5	11.3	13	--	13	61	--
Barium	20 J	31	37	40	41	1,500	--	--	5,500	14,000	--
Beryllium	0.77	0.84	0.87	0.67	0.75	22	--	--	160	410	--
Boron	14	17	18	16	18	40	--	--	16,000	41,000	--
Cadmium	ND UJ	ND U	ND U	0.34	0.3	5.2	--	--	78	200	--
Calcium	28,000	23,000	29,000	54,000	59,000	--	--	--	--	--	--
Chromium	17	19	18	18	18	21	--	--	230	690	--
Cobalt	17 J	15	17	14	14	20	--	--	4,700	12,000	--
Copper	33	31	35	27	32	2,900	--	--	2,900	8,200	--
Iron	23,000 †m	21,000 †m	22,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	17	16	18	15	15	107	--	--	400	700	--
Magnesium	19,000	15,000	18,000	23,000	25,000	325,000	--	--	--	730,000	--
Manganese	260	250	280	310	340	630	636	--	1,600	4,100	--
Mercury	0.018 J	0.013 J	0.0081 J	ND U	0.015 J	0.89	--	--	10	0.1	--
Nickel	45	43	47	38	38	100	--	--	1,600	4,100	--
Potassium	2,700	3,300	3,200	2,900	3,100	--	--	--	--	--	--
Selenium	0.77 J	0.78	1.2	0.59	1	1.3	--	--	390	1,000	--
Silver	2.4	2.3	2.2	2.2	2.3	4.4	--	--	390	1,000	--
Sodium	1,200	360	210	180	190	--	--	--	--	--	--
Thallium	1.1	1.1	1.4	1.3	1.1	2.6	--	--	6.3	160	--
Vanadium	19	21	20	20	21	550	--	--	550	1,400	--
Zinc	54 J	55	51	140	190	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.34 J	0.45 J	0.58	0.66	0.67	--	--	--	--	--	2
Boron	0.075 J	0.11 J	0.098 J	0.11 J	0.13 J	--	--	--	--	--	2
Cadmium	0.0042 J	0.002 J	ND U	ND U	ND U	--	--	--	--	--	0.005
Cobalt	0.02 J	0.059	0.026	0.018 J	0.013 J	--	--	--	--	--	1
Iron	0.2 J	ND U	0.37 J	0.27 J	0.3 J	--	--	--	--	--	5
Lead	ND U	ND U	0.0094 L	ND U	ND U	--	--	--	--	--	0.0075
Manganese	2.4 L	1.8 L	1.9 L	1.7 L	1.7 L	--	--	--	--	--	0.15
Mercury	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.002
Nickel	0.037	0.13 L	0.069	0.056	0.043	--	--	--	--	--	0.1
Zinc	ND U	0.024 J	ND U	0.041 J	0.027 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.57 L	0.024 J	0.029	0.018 J	0.044	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B08					MACs			TACO		
BORING	2615V2-AI-B08 (0-6)	2615V2-AI-B08 (6-12)	2615V2-AI-B08 (12-18)	2615V2-AI-B08 (18-24)	2615V2-AI-B08 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	7.8	7.6	7.8	7.6	7.7						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	0.0095 J	ND U	0.022	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	0.037 J	0.043 J	0.03 J	ND U	--	--	--	--	--	--
Chrysene	ND U	ND U	ND U	0.011 J	ND U	88	--	--	88	17,000	--
Phenanthrene	0.046	0.077	0.069	0.046	ND U	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.49 J	0.39 J	0.87 J	0.72 J	ND U	5	--	--	31	82	--
Arsenic	7.9	7.7	7.6	9.7	7.1	11.3	13	--	13	61	--
Barium	43	20	38	42	39	1,500	--	--	5,500	14,000	--
Beryllium	0.81	0.44	0.67	0.66	0.68	22	--	--	160	410	--
Boron	19	13	17	18	19	40	--	--	16,000	41,000	--
Cadmium	ND U	1.6	ND U	ND U	ND U	5.2	--	--	78	200	--
Calcium	30,000	95,000	63,000	57,000	53,000	--	--	--	--	--	--
Chromium	20	10	17	18	18	21	--	--	230	690	--
Cobalt	16	15	14	14	14	20	--	--	4,700	12,000	--
Copper	31	36	26	27	26	2,900	--	--	2,900	8,200	--
Iron	21,000 †m	20,000 †m	19,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	17	18	14	15	14	107	--	--	400	700	--
Magnesium	20,000	53,000	27,000	23,000	24,000	325,000	--	--	--	730,000	--
Manganese	310	980 †m	310	310	320	630	636	--	1,600	4,100	--
Mercury	0.021	0.019	0.022	0.017 J	0.024	0.89	--	--	10	0.1	--
Nickel	44	39	36	39	37	100	--	--	1,600	4,100	--
Potassium	3,800	2,100	3,100	3,100	3,300	--	--	--	--	--	--
Selenium	ND U	0.95	0.43 J	ND U	0.6	1.3	--	--	390	1,000	--
Silver	2.4	1.2	2.2	2.1	2.2	4.4	--	--	390	1,000	--
Sodium	870	160	190	200	200	--	--	--	--	--	--
Thallium	1.3	0.49 J	0.71	0.92	0.89	2.6	--	--	6.3	160	--
Vanadium	22	13	20	21	21	550	--	--	550	1,400	--
Zinc	50	370	59	52	62	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.51	0.56	0.67 J	0.56	0.6	--	--	--	--	--	2
Boron	0.11 J	0.1 J	0.16 J	0.11 J	0.13 J	--	--	--	--	--	2
Cobalt	0.043	0.024 J	0.015 J	0.032	0.015 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	0.33 J	ND U	--	--	--	--	--	5
Manganese	2.2 L	2 L	1.8 J L	3.8 L	1.9 L	--	--	--	--	--	0.15
Nickel	0.085	0.059	0.045	0.059	0.044	--	--	--	--	--	0.1
Selenium	0.04 J	0.039 J	ND U	ND U	0.03 J	--	--	--	--	--	0.05
Zinc	ND U	ND U	ND U	0.046 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.033	0.025	0.017 J	0.02 J	0.03	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B09					MACs			TACO		
BORING	2615V2-AI-B09 (0-6)	2615V2-AI-B09 (6-12)	2615V2-AI-B09 (12-18)	2615V2-AI-B09 (18-24)	2615V2-AI-B09 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	2615V2-AI-B09 (0-6)	2615V2-AI-B09 (6-12)	2615V2-AI-B09 (12-18)	2615V2-AI-B09 (18-24)	2615V2-AI-B09 (24-30)						
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-18	18-24	24-30						
pH	7.8	7.5	7.7	7.6	7.7						
PID > Bkd	--										
VOCs (mg/kg)											
Acetone	ND U	0.015 J	0.038	ND U	ND U	25	--	--	70,000	100,000	--
Trichloroethene	ND U	ND U	ND U	ND U	0.00065 J	0.06	--	--	5	12	--
Xylenes, Total	ND U	0.001 J	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.024 J	0.038 J	0.036 J	0.051 J	0.022 J	--	--	--	--	--	--
Benzo(a)anthracene	0.032 J	ND U	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Chrysene	0.057	0.039 J	0.023 J	ND U	ND U	88	--	--	88	17,000	--
Fluoranthene	0.042	ND U	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Phenanthrene	0.12	0.15	0.082	0.084	0.065	--	--	--	--	--	--
Pyrene	0.072	0.023 J	0.012 J	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.46 J	0.63 J	0.56 J	0.74 J	0.59 J	5	--	--	31	82	--
Arsenic	8.6	6.1	7.7	7.7	7.2	11.3	13	--	13	61	--
Barium	29	49	36	41	38	1,500	--	--	5,500	14,000	--
Beryllium	0.71	0.8	0.57	0.67	0.58	22	--	--	160	410	--
Boron	15	20	14	19	17	40	--	--	16,000	41,000	--
Calcium	32,000	50,000	55,000	54,000	58,000	--	--	--	--	--	--
Chromium	17	22 †	16	18	16	21	--	--	230	690	--
Cobalt	16	15	14	14	13	20	--	--	4,700	12,000	--
Copper	35	27	33	28	25	2,900	--	--	2,900	8,200	--
Iron	20,000 †m	21,000 †m	19,000 †m	20,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	18	15	15	15	14	107	--	--	400	700	--
Magnesium	20,000	23,000	24,000	23,000	25,000	325,000	--	--	--	730,000	--
Manganese	290	330	320	320	310	630	636	--	1,600	4,100	--
Mercury	0.035	0.02 J	0.021	0.021	0.021	0.89	--	--	10	0.1	--
Nickel	43	42	36	38	35	100	--	--	1,600	4,100	--
Potassium	2,900	4,000	2,600	3,400	2,900	--	--	--	--	--	--
Selenium	0.85	0.54 J	0.85	0.59 J	0.68	1.3	--	--	390	1,000	--
Silver	2	2.7	2	2.3	2.1	4.4	--	--	390	1,000	--
Sodium	730	250	170	200	210	--	--	--	--	--	--
Thallium	1.1	1	0.99	0.94	0.81	2.6	--	--	6.3	160	--
Vanadium	19	23	18	21	19	550	--	--	550	1,400	--
Zinc	54	54	52	53	54	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.49 J	0.79	0.63	0.54	0.55	--	--	--	--	--	2
Boron	0.095 J	0.12 J	0.1 J	0.12 J	0.12 J	--	--	--	--	--	2
Cobalt	0.056	0.02 J	0.013 J	0.015 J	0.014 J	--	--	--	--	--	1
Manganese	2.3 L	2.1 L	1.7 L	1.7 L	1.7 L	--	--	--	--	--	0.15
Nickel	0.12 L	0.063	0.041	0.04	0.042	--	--	--	--	--	0.1
Selenium	0.027 J	0.022 J	0.035 J	ND U	ND U	--	--	--	--	--	0.05
SPLP Metals (mg/L)											
Manganese	0.031	0.028	0.018 J	0.027	0.031	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)						Comparison Criteria					
	2615V2-AI-B10						MACs			TACO		
BORING	2615V2-AI-B10 (0-6)	2615V2-AI-B10 (6-12)	2615V2-AI-B10 (6-12)D	2615V2-AI-B10 (12-18)	2615V2-AI-B10 (18-24)	2615V2-AI-B10 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	6-12	12-18	18-24	24-30						
DEPTH (feet)	7.6	7.8	7.6	7.9	8.4	7.7						
pH	--											
PID > Bkd												
VOCs (mg/kg)												
Acetone	0.012 J	0.0077 J	0.068	0.028	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)												
2-Methylnaphthalene	ND U	0.026 J	0.026 J	0.04 J	0.033 J	0.036 J	--	--	--	--	--	--
Chrysene	0.029 J	0.022 J	0.029 J	ND U	ND U	0.021 J	88	--	--	88	17,000	--
Phenanthrene	0.11	0.071	0.095	0.07	0.07	0.07	--	--	--	--	--	--
Pyrene	ND U	0.01 J	0.015 J	ND U	0.0096 J	0.014 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)												
Antimony	0.6 J	0.65 J	0.75 J	0.63 J	0.93 J	0.62 J	5	--	--	31	82	--
Arsenic	6.6	8.4	4.7	6.9	7.3	8.8	11.3	13	--	13	61	--
Barium	47	37	47	40	42	38	1,500	--	--	5,500	14,000	--
Beryllium	0.87	0.69	0.89	0.7	0.63	0.65	22	--	--	160	410	--
Boron	22	18	21	17	19	16	40	--	--	16,000	41,000	--
Calcium	39,000	59,000	31,000	57,000	65,000	57,000	--	--	--	--	--	--
Chromium	22 †	17	23 †	17	17	17	21	--	--	230	690	--
Cobalt	16	14	15	13	14	14	20	--	--	4,700	12,000	--
Copper	30	31	26	25	27	26	2,900	--	--	2,900	8,200	--
Iron	21,000 †m	20,000 †m	20,000 †m	19,000 †m	19,000 †m	22,000 †m	15,000	15,900	--	--	--	--
Lead	16	16	14	13	14	15	107	--	--	400	700	--
Magnesium	24,000	25,000	20,000	23,000	28,000	23,000	325,000	--	--	--	730,000	--
Manganese	320	330	290	310	300	320	630	636	--	1,600	4,100	--
Mercury	0.027	0.027	0.026	0.023	0.026	0.03	0.89	--	--	10	0.1	--
Nickel	44	39	42	35	36	36	100	--	--	1,600	4,100	--
Potassium	4,200	3,200	4,500	3,000	3,200	2,900	--	--	--	--	--	--
Selenium	0.52 J	ND U	0.49 J	0.7	0.54 J	ND U	1.3	--	--	390	1,000	--
Silver	2.7	2.2	2.7	2.2	2.3	2	4.4	--	--	390	1,000	--
Sodium	880	230	400	190	210	200	--	--	--	--	--	--
Thallium	1.2	0.9	1.1	0.85	0.72	0.82	2.6	--	--	6.3	160	--
Vanadium	25	20	23	20	20	19	550	--	--	550	1,400	--
Zinc	57	53	56	49	57	52	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	0.51	0.63	0.5	0.6	0.61	0.53	--	--	--	--	--	2
Boron	0.094 J	0.098 J	0.12 J	0.11 J	0.13 J	0.13 J	--	--	--	--	--	2
Cobalt	0.035	0.019 J	0.018 J	0.013 J	0.014 J	0.013 J	--	--	--	--	--	1
Manganese	2.4 L	1.8 L	1.9 L	1.5 L	1.7 L	1.7 L	--	--	--	--	--	0.15
Nickel	0.095	0.053	0.049	0.04	0.04	0.039	--	--	--	--	--	0.1
Selenium	ND U	0.033 J	ND U	ND U	0.026 J	ND U	--	--	--	--	--	0.05
SPLP Metals (mg/L)												
Manganese	0.014 J	0.017 J	0.024 J	0.015 J	0.022 J	0.039	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B11					MACs			TACO		
BORING	2615V2-AI-B11 (0-6)	2615V2-AI-B11 (6-12)	2615V2-AI-B11 (12-18)	2615V2-AI-B11 (18-24)	2615V2-AI-B11 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.1	7.9	7.9	7.9	7.7						
pH	--										
PID > Bkd	--										
VOCs (mg/kg)											
Acetone	0.038	ND U	0.008 J	0.0094 J	0.026	25	--	--	70,000	100,000	--
Trichloroethene	ND U	ND U	ND U	ND U	0.00072 J	0.06	--	--	5	12	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	0.049 J	0.063 J	0.047 J	0.038 J	--	--	--	--	--	--
Acenaphthene	0.02 J	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Benzo(a)pyrene	ND U	ND U	ND U	0.0091 J	ND U	0.09	2.1	1.3	2.1	17	--
Chrysene	ND U	0.04	0.026 J	0.024 J	0.026 J	88	--	--	88	17,000	--
Phenanthrene	0.096	0.17	0.11	0.1	0.081	--	--	--	--	--	--
Pyrene	0.02 J	ND U	0.02 J	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.65 J	0.54 J	0.83 J	0.97 J	0.56 J	5	--	--	31	82	--
Arsenic	8 J	8.4	7.9	7.5	6.9	11.3	13	--	13	61	--
Barium	27	32	37	47	40	1,500	--	--	5,500	14,000	--
Beryllium	0.51	0.68	0.61	0.68	0.67	22	--	--	160	410	--
Boron	13	17	19	21	18	40	--	--	16,000	41,000	--
Calcium	57,000	31,000	59,000	56,000	54,000	--	--	--	--	--	--
Chromium	14	18	16	18	17	21	--	--	230	690	--
Cobalt	12	16	14	14	14	20	--	--	4,700	12,000	--
Copper	31 J	34	28	28	26	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	20,000 †m	19,000 †m	20,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	16 J	17	15	14	13	107	--	--	400	700	--
Magnesium	26,000	20,000	25,000	23,000	23,000	325,000	--	--	--	730,000	--
Manganese	250	300	330	300	300	630	636	--	1,600	4,100	--
Mercury	0.027	0.026	0.024	0.022	0.026	0.89	--	--	10	0.1	--
Nickel	32	44	36	37	36	100	--	--	1,600	4,100	--
Potassium	2,200	3,100	3,200	3,500	3,200	--	--	--	--	--	--
Selenium	0.45 J	0.42 J	0.57 J	ND U	0.69	1.3	--	--	390	1,000	--
Silver	1.8	2	2.4	2.4	2.3	4.4	--	--	390	1,000	--
Sodium	1,100	640	210	230	210	--	--	--	--	--	--
Thallium	0.75 J	1.1	0.92	1.1	0.78	2.6	--	--	6.3	160	--
Vanadium	16	19	20	22	20	550	--	--	550	1,400	--
Zinc	40 J	51	50	53	56	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.35 J	0.47 J	0.57	0.6	0.59	--	--	--	--	--	2
Boron	0.07 J	0.11 J	0.094 J	0.12 J	0.15 J	--	--	--	--	--	2
Cobalt	0.042	0.029	0.015 J	0.013 J	0.014 J	--	--	--	--	--	1
Manganese	1.8 L	1.9 L	1.6 L	1.8 L	1.9 L	--	--	--	--	--	0.15
Mercury	ND U	ND U	ND U	ND U	0.0003	--	--	--	--	--	0.002
Nickel	0.1	0.071	0.046	0.038	0.043	--	--	--	--	--	0.1
Selenium	0.027 J	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	0.02 J	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.098	0.028	0.014 J	0.028	0.029	--	--	--	--	--	0.15
Nickel	0.022 J	NA	NA	NA	NA	--	--	--	--	--	0.1

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B12					MACs			TACO		
BORING						Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	2615V2-AI-B12 (0-6)	2615V2-AI-B12 (6-12)	2615V2-AI-B12 (12-18)	2615V2-AI-B12 (18-24)	2615V2-AI-B12 (24-30)						
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-18	18-24	24-30						
pH	8.1	7.6	7.6	7.8	7.7						
PID > Bkd			--								
VOCs (None Detect)											
SVOCs (mg/kg)											
2-Methylnaphthalene	0.036 J	0.026 J	0.027 J	0.041 J	0.047 J	--	--	--	--	--	--
Anthracene	0.051	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.079	0.014 J	ND U	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.082	ND U	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.085	ND U	ND U	ND U	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.024 J	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	0.084	ND U	ND U	ND U	ND U	9	--	--	9	1,700	--
Chrysene	0.1	0.012 J	ND U	0.029 J	0.029 J	88	--	--	88	17,000	--
Fluoranthene	0.21	ND U	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Fluorene	0.027 J	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.034 J	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.033 J	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.22	0.094	0.073	0.095	0.11	--	--	--	--	--	--
Pyrene	0.19	ND U	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.56 J	0.45 J	0.61 J	0.51 J	0.55 J	5	--	--	31	82	--
Arsenic	3	8.1	8.5	8.3	7.8	11.3	13	--	13	61	--
Barium	18	33	41	39	39	1,500	--	--	5,500	14,000	--
Beryllium	0.41	0.78	0.76	0.75	0.73	22	--	--	160	410	--
Boron	11	15	18	17	17	40	--	--	16,000	41,000	--
Calcium	110,000	41,000	51,000	52,000	51,000	--	--	--	--	--	--
Chromium	7.5	18	19	18	18	21	--	--	230	690	--
Cobalt	5.8	16	15	14	15	20	--	--	4,700	12,000	--
Copper	12	34	30	29	30	2,900	--	--	2,900	8,200	--
Iron	8,800	21,000 †m	20,000 †m	21,000 †m	21,000 †m	15,000	15,900	--	--	--	--
Lead	16	17	15	14	15	107	--	--	400	700	--
Magnesium	62,000	20,000	22,000	23,000	21,000	325,000	--	--	--	730,000	--
Manganese	230	300	330	360	330	630	636	--	1,600	4,100	--
Mercury	0.037	ND U	ND U	ND U	ND U	0.89	--	--	10	0.1	--
Nickel	14	41	37	36	37	100	--	--	1,600	4,100	--
Potassium	1,300	2,800	3,000	2,900	2,900	--	--	--	--	--	--
Selenium	0.52 J	0.9	0.84	0.58 J	0.93	1.3	--	--	390	1,000	--
Silver	1.1	2.3	2.5	2.4	2.3	4.4	--	--	390	1,000	--
Sodium	430	450	180	180	180	--	--	--	--	--	--
Thallium	0.31 J	0.89	0.87	0.71	1	2.6	--	--	6.3	160	--
Vanadium	9.2	20	21	21	21	550	--	--	550	1,400	--
Zinc	24	49	52	62	52	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.55	0.56	0.75	0.66	0.62	--	--	--	--	--	2
Boron	0.064 J	0.07 J	0.084 J	0.094 J	0.12 J	--	--	--	--	--	2
Cobalt	0.022 J	0.038	0.014 J	0.012 J	0.014 J	--	--	--	--	--	1
Lead	0.0081 L	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	1.9 L	2.3 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.036	0.084	0.041	0.037	0.038	--	--	--	--	--	0.1
Zinc	0.067 J	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Lead	0.0077 L	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.031	0.035	0.016 J	0.016 J	0.025	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)						Comparison Criteria					
	2615V2-AI-B15						MACs			TACO		
BORING	2615V2-AI-B15 (0-6)	2615V2-AI-B15 (6-12)	2615V2-AI-B15 (12-18)	2615V2-AI-B15 (12-18)D	2615V2-AI-B15 (18-24)	2615V2-AI-B15 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	12-18	18-24	24-30						
DEPTH (feet)	8.0	8.0	8.1	8.1	8.1	8.1						
pH	--											
PID > Bkd												
VOCs (mg/kg)												
Acetone	ND U	0.02	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
cis-1,2-Dichloroethene	0.024	ND U	ND U	ND U	ND U	ND U	0.4	--	--	780	1,200	--
trans-1,2-Dichloroethene	0.0041	ND U	ND U	ND U	ND U	ND U	0.7	--	--	1,600	3,100	--
SVOCs (mg/kg)												
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	0.12 J	ND U	46	--	--	46	4,100	--
Phenanthrene	0.2	0.11	0.15	0.13	0.096	0.12	--	--	--	--	--	--
Inorganics (mg/kg)												
Antimony	0.61 J	0.45 J	0.66 J	0.67 J	0.74 J	0.76 J	5	--	--	31	82	--
Arsenic	7.9 J	7.8	7.5	7.6	8.4	7.5	11.3	13	--	13	61	--
Barium	48	32	42	39	41	42	1,500	--	--	5,500	14,000	--
Beryllium	0.68	0.58	0.62	0.62	0.67	0.66	22	--	--	160	410	--
Boron	13	14	15	15	17	16	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	0.3	0.25	0.24	0.22	5.2	--	--	78	200	--
Calcium	28,000	54,000	53,000	50,000	54,000	54,000	--	--	--	--	--	--
Chromium	18	15	17	19	18	17	21	--	--	230	690	--
Cobalt	15	13	14	14	15	14	20	--	--	4,700	12,000	--
Copper	33 J	34	27	26	26	29	2,900	--	--	2,900	8,200	--
Iron	22,000 †m	18,000 †m	20,000 †m	20,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	16	14	13	14	13	14	107	--	--	400	700	--
Magnesium	19,000	26,000	23,000	22,000	23,000	23,000	325,000	--	--	--	730,000	--
Manganese	310	360	320	320	340	320	630	636	--	1,600	4,100	--
Mercury	0.024	0.016 J	0.022	0.022	0.024	0.023	0.89	--	--	10	0.1	--
Nickel	43	35	36	36	37	36	100	--	--	1,600	4,100	--
Potassium	2,800	2,600	2,800	2,800	3,100	2,900	--	--	--	--	--	--
Selenium	0.75 J	ND U	0.51 J	0.48 J	ND U	0.47 J	1.3	--	--	390	1,000	--
Silver	2.3	1.8	2.1	2	2.2	2.1	4.4	--	--	390	1,000	--
Sodium	1,100	180	180	170	180	190	--	--	--	--	--	--
Thallium	2.2	1.3	1.9	1.8	1.5	2	2.6	--	--	6.3	160	--
Vanadium	18	16	19	18	19	19	550	--	--	550	1,400	--
Zinc	51 J	45	55	53	59	57	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	0.73	0.5	0.66	0.64	0.66	0.61	--	--	--	--	--	2
Boron	0.058 J	0.065 J	0.071 J	0.071 J	0.082 J	0.089 J	--	--	--	--	--	2
Cobalt	0.015 J	0.01 J	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Manganese	3.1 L	1.8 L	1.8 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.021 J	0.028	0.027	0.027	0.027 J	0.025	--	--	--	--	--	0.1
Zinc	0.2 J	ND U	ND U	ND U	0.16 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)												
Manganese	1 L	0.022 J	0.026	0.028	0.057	0.087	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B16					MACs			TACO		
BORING	2615V2-AI-B16 (0-6)	2615V2-AI-B16 (6-12)	2615V2-AI-B16 (12-18)	2615V2-AI-B16 (18-24)	2615V2-AI-B16 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.3	7.9	8.3	8.3	8.2						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	0.036	0.026	ND U	0.017 J	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
Fluorene	0.0066 J	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Phenanthrene	0.12	0.068	0.064	0.09	0.057	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.84 J	0.78 J	0.93 J	0.85 J	0.78 J	5	--	--	31	82	--
Arsenic	6.2	5.9	7.3	7.4	8	11.3	13	--	13	61	--
Barium	35	42	39	42	42	1,500	--	--	5,500	14,000	--
Beryllium	0.65	0.85	0.67	0.75	0.73	22	--	--	160	410	--
Boron	13	17	17	18	19	40	--	--	16,000	41,000	--
Calcium	150,000	26,000	57,000	56,000	53,000	--	--	--	--	--	--
Chromium	14	20	17	17	18	21	--	--	230	690	--
Cobalt	14	15	14	14	15	20	--	--	4,700	12,000	--
Copper	26	29	27	29	28	2,900	--	--	2,900	8,200	--
Iron	15,000	19,000 †m	20,000 †m	19,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	14	15	14	14	15	107	--	--	400	700	--
Magnesium	15,000	17,000	23,000	23,000	22,000	325,000	--	--	--	730,000	--
Manganese	280	270	330	310	310	630	636	--	1,600	4,100	--
Mercury	0.0076 J	ND U	0.035	0.034	0.03	0.89	--	--	10	0.1	--
Nickel	36	42	37	37	39	100	--	--	1,600	4,100	--
Potassium	2,600	3,400	3,100	3,100	3,200	--	--	--	--	--	--
Selenium	0.51 J	0.92	0.66	0.87	0.66	1.3	--	--	390	1,000	--
Silver	1.6	2.4	2.5	2.4	2.2	4.4	--	--	390	1,000	--
Sodium	1,200	1,000	180	200	200	--	--	--	--	--	--
Thallium	1.3	1.4	1.1	0.9	1.2	2.6	--	--	6.3	160	--
Vanadium	16	21	20	20	21	550	--	--	550	1,400	--
Zinc	45	59	76	53	54	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.58	0.67	0.6	0.66	0.65	--	--	--	--	--	2
Boron	0.073 J	0.15 J	0.099 J	0.15 J	0.17 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	0.0021 J	ND U	--	--	--	--	--	0.005
Cobalt	0.088	0.048	0.019 J	0.042	0.016 J	--	--	--	--	--	1
Iron	0.23 J	0.22 J	0.21 J	ND U	0.36 J	--	--	--	--	--	5
Lead	ND U	ND U	0.0093 L	0.017 L	ND U	--	--	--	--	--	0.0075
Manganese	2.5 L	2.5 L	1.8 L	3.9 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.16 L	0.099	0.054	0.075	0.049	--	--	--	--	--	0.1
Zinc	0.068 J	0.066 J	ND U	0.049 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.8 L	0.062	0.023 J	0.048	0.062	--	--	--	--	--	0.15
Nickel	0.19 L	NA	NA	NA	NA	--	--	--	--	--	0.1

**PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN**

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B18					MACs			TACO		
BORING	2615V2-AI-B18 (0-6)	2615V2-AI-B18 (6-12)	2615V2-AI-B18 (12-18)	2615V2-AI-B18 (18-24)	2615V2-AI-B18 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.0	8.0	8.1	8.4	8.5						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	ND U	0.029	ND U	ND U	25	--	--	70,000	100,000	--
Vinyl chloride	0.0013 J	ND U	ND U	ND U	ND U	0.01	--	--	0.28	1.1	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	0.044 J	0.043 J	0.036 J	0.022 J	--	--	--	--	--	--
Chrysene	0.018 J	ND U	0.018 J	ND U	0.012 J	88	--	--	88	17,000	--
Fluorene	ND U	0.006 J	0.0061 J	ND U	ND U	560	--	--	3,100	82,000	--
Phenanthrene	0.044 J	0.073	0.069	0.07	0.048	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.68 J	0.3 J	0.45 J	0.56 J	0.53 J	5	--	--	31	82	--
Arsenic	7 J	8	8	7.4	8	11.3	13	--	13	61	--
Barium	53	46	47	46	46	1,500	--	--	5,500	14,000	--
Beryllium	0.78	0.63	0.76	0.65	0.71	22	--	--	160	410	--
Boron	17	17	18	18	19	40	--	--	16,000	41,000	--
Calcium	31,000	53,000	54,000	50,000	51,000	--	--	--	--	--	--
Chromium	18	16	16	17	17	21	--	--	230	690	--
Cobalt	15	14	14	14	14	20	--	--	4,700	12,000	--
Copper	31	29	33	30	31	2,900	--	--	2,900	8,200	--
Iron	21,000 †m	21,000 †m	22,000 †m	21,000 †m	21,000 †m	15,000	15,900	--	--	--	--
Lead	17 J	15	15	14	14	107	--	--	400	700	--
Magnesium	20,000	23,000	23,000	22,000	22,000	325,000	--	--	--	730,000	--
Manganese	310	350	350	330	330	630	636	--	1,600	4,100	--
Mercury	0.04	0.029	0.03	0.026	0.031	0.89	--	--	10	0.1	--
Nickel	41	36	38	36	37	100	--	--	1,600	4,100	--
Potassium	3,800	3,500	3,700	3,600	3,800	--	--	--	--	--	--
Selenium	0.75 J	0.57 J	0.73	0.62	0.36 J	1.3	--	--	390	1,000	--
Silver	2.5	2.1	2.1	2.1	2.2	4.4	--	--	390	1,000	--
Sodium	1,600	200	210	200	220	--	--	--	--	--	--
Thallium	1.1 J	0.88	0.9	0.89	0.71	2.6	--	--	6.3	160	--
Vanadium	20	19	20	19	19	550	--	--	550	1,400	--
Zinc	51	56	54	57	56	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.82	0.73	0.73	0.62	0.62	--	--	--	--	--	2
Boron	0.076 J	0.083 J	0.097 J	0.089 J	0.095 J	--	--	--	--	--	2
Cobalt	0.015 J	0.012 J	0.012 J	0.012 J	ND U	--	--	--	--	--	1
Manganese	3 L	1.8 L	1.8 L	1.8 L	1.9 L	--	--	--	--	--	0.15
Nickel	0.021 J	0.039	0.037	0.033	0.031	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	0.85 L	0.02 J	0.029	0.047	0.11	--	--	--	--	--	0.15

**PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN**

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B19					MACs			TACO		
BORING	2615V2-AI-B19 (0-6)	2615V2-AI-B19 (6-12)	2615V2-AI-B19 (12-18)	2615V2-AI-B19 (18-24)	2615V2-AI-B19 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE											
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-18	18-24	24-30						
pH	8.5	7.3	7.4	7.6	7.3						
PID > Bkd	--										
VOCs (mg/kg)											
Acetone	0.02	0.024	0.032	ND U	0.012 J	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
Chrysene	ND U	ND U	0.029 J	0.03 J	ND U	88	--	--	88	17,000	--
Phenanthrene	0.09	0.16	0.12	0.12	0.12	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.36 J	0.48 J	0.74 J	0.7 J	0.64 J	5	--	--	31	82	--
Arsenic	5.1	6.8	7.9	7.4	6.6	11.3	13	--	13	61	--
Barium	35	32	38	38	37	1,500	--	--	5,500	14,000	--
Beryllium	0.49	0.64	0.65	0.66	0.64	22	--	--	160	410	--
Boron	9.2	17	19	19	19	40	--	--	16,000	41,000	--
Calcium	33,000	52,000	51,000	54,000	54,000	--	--	--	--	--	--
Chromium	17	17	19	19	18	21	--	--	230	690	--
Cobalt	14	13	14	14	13	20	--	--	4,700	12,000	--
Copper	23	26	25	24	22	2,900	--	--	2,900	8,200	--
Iron	16,000 †m	19,000 †m	20,000 †m	20,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	15	14	14	15	13	107	--	--	400	700	--
Magnesium	20,000	23,000	23,000	23,000	23,000	325,000	--	--	--	730,000	--
Manganese	280	310	320	330	360	630	636	--	1,600	4,100	--
Mercury	0.014 J	0.022	0.016 J	0.018 J	0.019 J	0.89	--	--	10	0.1	--
Nickel	37	35	37	37	35	100	--	--	1,600	4,100	--
Potassium	2,100	2,900	3,300	3,100	3,200	--	--	--	--	--	--
Selenium	0.48 J	0.81	0.47 J	0.49 J	0.67	1.3	--	--	390	1,000	--
Silver	1.7	1.7	2	2	1.8	4.4	--	--	390	1,000	--
Sodium	1,000	360	230	180	180	--	--	--	--	--	--
Thallium	1	0.84	1	0.8	0.75	2.6	--	--	6.3	160	--
Vanadium	14	20	22	22	21	550	--	--	550	1,400	--
Zinc	43	49	56	54	45	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.71	0.6	0.7	0.63	0.64 J	--	--	--	--	--	2
Boron	0.053 J	0.11 J	0.12 J	0.084 J	0.089 J	--	--	--	--	--	2
Cobalt	0.035	0.028	0.014 J	0.012 J	0.014 J	--	--	--	--	--	1
Manganese	2.7 L	2 L	1.7 L	1.7 L	1.8 J L	--	--	--	--	--	0.15
Nickel	0.055	0.062	0.036	0.033	0.035 J	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	1.7 L	0.018 J	0.032	0.03	0.017 J	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B20					MACs			TACO		
BORING	2615V2-AI-B20 (0-6)	2615V2-AI-B20 (6-12)	2615V2-AI-B20 (12-18)	2615V2-AI-B20 (18-24)	2615V2-AI-B20 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.2	7.9	7.7	7.6	7.6						
pH											
PID > Bkd											
VOCs (mg/kg)											
Acetone	ND U	0.012 J	ND U	0.0096 J	0.011 J	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
Chrysene	ND U	ND U	ND U	0.034 J	0.025 J	88	--	--	88	17,000	--
Phenanthrene	0.17	0.11	0.13	0.13	0.13	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.58 J	0.68 J	0.7 J	0.47 J	0.51 J	5	--	--	31	82	--
Arsenic	8.6	7.1	6.8	7.1	6.4	11.3	13	--	13	61	--
Barium	32	40	39	40	35	1,500	--	--	5,500	14,000	--
Beryllium	0.71	0.6	0.62	0.63	0.53	22	--	--	160	410	--
Boron	18	19	20	21	11	40	--	--	16,000	41,000	--
Calcium	30,000	57,000	53,000	52,000	51,000	--	--	--	--	--	--
Chromium	19	19	19	19	16	21	--	--	230	690	--
Cobalt	17	14	14	14	13	20	--	--	4,700	12,000	--
Copper	32	25	24	25	27	2,900	--	--	2,900	8,200	--
Iron	20,000 †m	20,000 †m	20,000 †m	20,000 †m	18,000 †m	15,000	15,900	--	--	--	--
Lead	18	14	15	14	14	107	--	--	400	700	--
Magnesium	18,000	25,000	23,000	23,000	22,000	325,000	--	--	--	730,000	--
Manganese	280	320	310	310	310	630	636	--	1,600	4,100	--
Mercury	0.026	0.015 J	0.017 J	0.018 J	0.018 J	0.89	--	--	10	0.1	--
Nickel	45	36	39	38	36	100	--	--	1,600	4,100	--
Potassium	3,300	3,400	3,400	3,400	1,900	--	--	--	--	--	--
Selenium	1.1	0.81	0.56 J	ND U	0.59	1.3	--	--	390	1,000	--
Silver	2	2.2	2.1	2.2	1.8	4.4	--	--	390	1,000	--
Sodium	680	190	180	190	170	--	--	--	--	--	--
Thallium	1	1.1	0.71	1.1	0.78	2.6	--	--	6.3	160	--
Vanadium	22	23	23	24	15	550	--	--	550	1,400	--
Zinc	51	58	51	58	51	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.63	0.77	0.72	0.62	0.58	--	--	--	--	--	2
Boron	0.084 J	0.099 J	0.084 J	0.092 J	0.095 J	--	--	--	--	--	2
Cobalt	0.053	0.016 J	0.012 J	0.012 J	0.013 J	--	--	--	--	--	1
Manganese	2.2 L	1.9 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.12 L	0.046	0.036	0.032	0.033	--	--	--	--	--	0.1
Zinc	0.025 J	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	0.033	0.03	0.017 J	0.029	0.024 J	--	--	--	--	--	0.15

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CONTAMINANTS OF CONCERN**

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B21					MACs			TACO		
BORING	2615V2-AI-B21 (0-6)	2615V2-AI-B21 (6-12)	2615V2-AI-B21 (12-18)	2615V2-AI-B21 (18-24)	2615V2-AI-B21 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE											
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-6	6-12	12-18	18-24	24-30						
pH	8.1	7.8	8.0	8.3	8.2						
PID > Bkd	--										
VOCs (mg/kg)											
Acetone	ND U	ND U	0.0084 J	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
Chrysene	0.06	ND U	0.035 J	0.027 J	ND U	88	--	--	88	17,000	--
Phenanthrene	0.073	0.12	0.12	0.13	0.12	--	--	--	--	--	--
Inorganics (mg/kg)											
Antimony	0.51 J	0.67 J	0.55 J	0.59 J	0.51 J	5	--	--	31	82	--
Arsenic	8.9	7	9.8	7	6.5	11.3	13	--	13	61	--
Barium	24	38	39	39	43	1,500	--	--	5,500	14,000	--
Beryllium	0.61	0.59	0.67	0.68	0.73	22	--	--	160	410	--
Boron	18	19	19	21	22	40	--	--	16,000	41,000	--
Calcium	28,000	61,000	52,000	50,000	55,000	--	--	--	--	--	--
Chromium	16	18	18	19	20	21	--	--	230	690	--
Cobalt	16	13	14	14	14	20	--	--	4,700	12,000	--
Copper	39	25	25	26	22	2,900	--	--	2,900	8,200	--
Iron	20,000 †m	19,000 †m	19,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	19	14	14	14	14	107	--	--	400	700	--
Magnesium	19,000	24,000	23,000	22,000	22,000	325,000	--	--	--	730,000	--
Manganese	260	310	310	310	300	630	636	--	1,600	4,100	--
Mercury	0.022	0.018 J	0.019	0.013 J	0.017 J	0.89	--	--	10	0.1	--
Nickel	44	35	36	38	36	100	--	--	1,600	4,100	--
Potassium	2,900	3,300	3,300	3,400	3,600	--	--	--	--	--	--
Selenium	1.1	0.7	0.58 J	0.74	0.88	1.3	--	--	390	1,000	--
Silver	1.9	2	2.1	2.2	2.2	4.4	--	--	390	1,000	--
Sodium	620	210	180	200	210	--	--	--	--	--	--
Thallium	1.4	0.65	0.86	0.9	0.67	2.6	--	--	6.3	160	--
Vanadium	20	22	22	23	24	550	--	--	550	1,400	--
Zinc	46	51	54	59	49	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.35 J	0.71	0.76	0.65	0.64	--	--	--	--	--	2
Boron	0.082 J	0.091 J	0.09 J	0.092 J	0.096 J	--	--	--	--	--	2
Cobalt	0.026	0.017 J	0.014 J	0.015 J	0.012 J	--	--	--	--	--	1
Manganese	1.6 L	1.8 L	1.9 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.042	0.051	0.038	0.04	0.036	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	0.07	0.019 J	0.016 J	0.028	0.039	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B22					MACs			TACO		
BORING	2615V2-AI-B22 (0-6)	2615V2-AI-B22 (6-12)	2615V2-AI-B22 (12-18)	2615V2-AI-B22 (18-24)	2615V2-AI-B22 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.2	7.9	7.8	8.1	8.0						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	0.024	ND U	0.015 J	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	0.073 J	0.038 J	0.049 J	ND U	ND U	--	--	--	--	--	--
Benzo(g,h,i)perylene	ND UJ	ND U	0.018 J	ND U	ND U	--	--	--	--	--	--
Chrysene	0.033 J	ND U	0.022 J	ND U	0.027 J	88	--	--	88	17,000	--
Fluoranthene	0.0072 J	ND U	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Phenanthrene	0.12	0.1	0.11	0.11	0.095	--	--	--	--	--	--
Pyrene	0.019 J	ND U	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.51 J	0.39 J	0.52 J	0.44 J	0.58 J	5	--	--	31	82	--
Arsenic	7.9 J	6.7	6.4	5.9	8	11.3	13	--	13	61	--
Barium	33	30	33	27	35	1,500	--	--	5,500	14,000	--
Beryllium	0.6	0.47	0.4	0.42	0.59	22	--	--	160	410	--
Boron	18	9.3	9.5	9.8	17	40	--	--	16,000	41,000	--
Calcium	56,000	49,000	53,000	34,000	47,000	--	--	--	--	--	--
Chromium	17	14	15	13	17	21	--	--	230	690	--
Cobalt	15	13	13	11	15	20	--	--	4,700	12,000	--
Copper	29 J	25	23	21	30	2,900	--	--	2,900	8,200	--
Iron	19,000 †m	17,000 †m	17,000 †m	15,000	20,000 †m	15,000	15,900	--	--	--	--
Lead	16 J	13	14	12	16	107	--	--	400	700	--
Magnesium	26,000	22,000	23,000	19,000	21,000	325,000	--	--	--	730,000	--
Manganese	360	300	300	250	290	630	636	--	1,600	4,100	--
Mercury	0.025	0.023	0.017 J	0.025	0.015 J	0.89	--	--	10	0.1	--
Nickel	39	34	34	29	40	100	--	--	1,600	4,100	--
Potassium	3,100	1,700	1,800	1,700	2,900	--	--	--	--	--	--
Selenium	0.5 J	0.56 J	0.74	0.68	0.8	1.3	--	--	390	1,000	--
Silver	1.9	1.6	1.6	1.6	1.9	4.4	--	--	390	1,000	--
Sodium	860	170	160	140	180	--	--	--	--	--	--
Thallium	0.93	0.81	0.75	0.68	1.2	2.6	--	--	6.3	160	--
Vanadium	20	13	14	13	20	550	--	--	550	1,400	--
Zinc	50	47	47	40	54	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.47 J	0.67	0.76	0.64	0.62	--	--	--	--	--	2
Boron	0.063 J	0.068 J	0.089 J	0.13 J	0.094 J	--	--	--	--	--	2
Cobalt	0.032	0.017 J	0.015 J	0.015 J	0.014 J	--	--	--	--	--	1
Manganese	2.3 L	1.8 L	1.9 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	0.069	0.046	0.042	0.042	0.035	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Manganese	0.11	0.016 J	0.022 J	0.034	0.052	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)					Comparison Criteria					
	2615V2-AI-B23					MACs			TACO		
BORING	2615V2-AI-B23 (0-6)	2615V2-AI-B23 (6-12)	2615V2-AI-B23 (12-18)	2615V2-AI-B23 (18-24)	2615V2-AI-B23 (24-30)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-6	6-12	12-18	18-24	24-30						
DEPTH (feet)	8.3	7.4	7.6	7.6	7.6						
pH	--										
PID > Bkd											
VOCs (mg/kg)											
Acetone	0.0097 J	ND U	ND U	0.021	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
2-Methylnaphthalene	ND U	0.025 J	0.032 J	ND U	0.048 J	--	--	--	--	--	--
Chrysene	0.02 J	ND U	ND U	0.012 J	0.031 J	88	--	--	88	17,000	--
Phenanthrene	0.064	0.079	0.053	0.053	0.11	--	--	--	--	--	--
Pyrene	ND U	ND U	ND U	ND U	0.019 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.56 J	0.36 J	0.5 J	0.41 J	0.61 J	5	--	--	31	82	--
Arsenic	5.4	9.6	7.5	7.5	7.5	11.3	13	--	13	61	--
Barium	32	32	39	37	36	1,500	--	--	5,500	14,000	--
Beryllium	0.81	0.7	0.74	0.66	0.58	22	--	--	160	410	--
Boron	17	18	18	19	14	40	--	--	16,000	41,000	--
Calcium	29,000	25,000	54,000	53,000	49,000	--	--	--	--	--	--
Chromium	20	19	18	19	16	21	--	--	230	690	--
Cobalt	12	18	14	14	14	20	--	--	4,700	12,000	--
Copper	34	38	29	45	30	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	24,000 †m	20,000 †m	20,000 †m	20,000 †m	15,000	15,900	--	--	--	--
Lead	18	21	14	13	14	107	--	--	400	700	--
Magnesium	18,000	15,000	23,000	23,000	22,000	325,000	--	--	--	730,000	--
Manganese	250	270	350	320	320	630	636	--	1,600	4,100	--
Mercury	ND U	0.03	ND U	ND U	ND U	0.89	--	--	10	0.1	--
Nickel	38	46	36	36	36	100	--	--	1,600	4,100	--
Potassium	3,200	3,300	2,900	3,100	2,400	--	--	--	--	--	--
Selenium	0.52 J	0.76	0.46 J	0.85	0.53 J	1.3	--	--	390	1,000	--
Silver	2.8	2.5	2.4	2.5	2.3	4.4	--	--	390	1,000	--
Sodium	1,100	480	170	190	180	--	--	--	--	--	--
Thallium	1	1.3	1	0.91	0.81	2.6	--	--	6.3	160	--
Vanadium	21	22	21	22	18	550	--	--	550	1,400	--
Zinc	55	50	51	800	53	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.56	0.43 J	0.71	0.56	0.6	--	--	--	--	--	2
Boron	0.077 J	0.07 J	0.085 J	0.093 J	0.13 J	--	--	--	--	--	2
Cadmium	ND U	0.0024 J	ND U	ND U	ND U	--	--	--	--	--	0.005
Cobalt	ND U	0.035	0.013 J	0.014 J	0.013 J	--	--	--	--	--	1
Manganese	2.2 L	2.1 L	1.8 L	1.8 L	1.8 L	--	--	--	--	--	0.15
Nickel	ND U	0.079	0.038	0.04	0.039	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	ND U	0.025 J	--	--	--	--	--	5
SPLP Metals (mg/L)											
Manganese	1.2 L	0.016 J	0.019 J	0.022 J	0.02 J	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)			ISGS #2615V2-1 (Polk Street Accident Investigation Site)			Comparison Criteria					
	2615V2-AI-B25			2615V2-AI-B26			MACs			TACO		
BORING	2615V2-AI-B25 (0-5)	2615V2-AI-B25 (5-10)	2615V2-AI-B25 (10-15)	2615V2-AI-B26 (0-5)	2615V2-AI-B26 (5-10)	2615V2-AI-B26 (10-15)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	0-5	5-10	10-15						
pH	7.9	7.3	7.6	7.7	7.6	7.8						
PID > Bkd		--			--							
VOCs (mg/kg)												
Acetone	0.0079 J	ND U	0.025	0.013 J	ND U	ND U	25	--	--	70,000	100,000	--
Trichloroethene	ND U	ND U	ND U	ND U	ND U	0.001 J	0.06	--	--	5	12	--
SVOCs (mg/kg)												
2-Methylnaphthalene	0.053 J	0.052 J	0.039 J	0.014 J	0.031 J	0.027 J	--	--	--	--	--	--
Chrysene	0.032 J	0.029 J	ND U	ND U	ND U	0.028 J	88	--	--	88	17,000	--
Fluoranthene	0.013 J	ND U	ND U	ND U	ND U	ND U	3,100	--	--	3,100	82,000	--
Phenanthrene	0.11	0.11	0.11	0.051	0.078	0.092	--	--	--	--	--	--
Pyrene	0.03 J	0.02 J	0.025 J	ND U	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)												
Antimony	0.45 J	0.46 J	0.47 J	ND U	ND U	ND U	5	--	--	31	82	--
Arsenic	8.2	7.7	7.8	6.2	6.7	7.1	11.3	13	--	13	61	--
Barium	33	37	36	33	34	36	1,500	--	--	5,500	14,000	--
Beryllium	0.69	0.61	0.64	0.61	0.68	0.75	22	--	--	160	410	--
Boron	15	16	15	15	18	18	40	--	--	16,000	41,000	--
Calcium	59,000	57,000	73,000	53,000	62,000	55,000	--	--	--	--	--	--
Chromium	15	16	15	15	16	16	21	--	--	230	690	--
Cobalt	15	14	13	12	12	13	20	--	--	4,700	12,000	--
Copper	41	31	31	24	24	27	2,900	--	--	2,900	8,200	--
Iron	19,000 †m	20,000 †m	19,000 †m	21,000 †m	23,000 †m	23,000 †m	15,000	15,900	--	--	--	--
Lead	22	14	14	14	13	16	107	--	--	400	700	--
Magnesium	25,000	23,000	31,000	24,000	26,000	24,000	325,000	--	--	--	730,000	--
Manganese	380	330	380	340	310	320	630	636	--	1,600	4,100	--
Mercury	0.021	0.019	0.025	0.022	0.025	0.021	0.89	--	--	10	0.1	--
Nickel	38	35	35	32	33	35	100	--	--	1,600	4,100	--
Potassium	2,800	2,900	2,600	2,800	3,100	3,100	--	--	--	--	--	--
Selenium	0.71	ND U	0.38 J	0.76	0.73	0.7	1.3	--	--	390	1,000	--
Silver	2.3	2.4	2.1	2.4	2.3	2.4	4.4	--	--	390	1,000	--
Sodium	830	280	240	880	470	190	--	--	--	--	--	--
Thallium	1.2	0.9	0.86	0.84	0.8	1.1	2.6	--	--	6.3	160	--
Vanadium	17	19	17	19	20	20	550	--	--	550	1,400	--
Zinc	51	62	57	54	48	57	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	0.61	0.74	0.62	0.52	0.69	0.7	--	--	--	--	--	2
Boron	0.11 J	0.12 J	0.12 J	0.076 J	0.1 J	0.12 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	0.0026 J	ND U	ND U	--	--	--	--	--	0.005
Cobalt	0.025	0.013 J	0.016 J	0.039	0.014 J	0.015 J	--	--	--	--	--	1
Iron	ND U	ND U	ND U	0.34 J	0.23 J	0.21 J	--	--	--	--	--	5
Manganese	2.2 L	2.1 L	2 J L	3.7 L	1.8 L	1.9 L	--	--	--	--	--	0.15
Nickel	0.061	0.039	0.038	0.067	0.038	0.039	--	--	--	--	--	0.1
Zinc	0.24 J	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)												
Manganese	0.034	0.035	0.024 J	0.51 L	0.03	0.032	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	ISGS #2615V2-1 (Polk Street Accident Investigation Site)				ISGS #2615V2-1 (Polk Street Accident Investigation Site)			Comparison Criteria					
	2615V2-AI-B27				2615V2-AI-B28			MACs			TACO		
BORING	2615V2-AI-B27 (0-5)	2615V2-AI-B27 (5-10)	2615V2-AI-B27 (5-10)D	2615V2-AI-B27 (10-15)	2615V2-AI-B28 (0-5)	2615V2-AI-B28 (5-10)	2615V2-AI-B28 (10-15)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE													
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	5-10	10-15	0-5	5-10	10-15						
pH	8.1	7.4	7.5	7.6	8.7	7.6	7.6						
PID > Bkd			--			--							
VOCs (mg/kg)													
Acetone	ND U	0.027	ND U	ND U	0.012 J	0.019	0.015 J	25	--	--	70,000	100,000	--
Xylenes, Total	0.00062 J	0.00068 J	0.00075 J	ND U	0.00084 J	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)													
2-Methylnaphthalene	0.024 J	0.076 J	0.035 J	0.053 J	ND U	ND U	0.093	--	--	--	--	--	--
Benzo(a)anthracene	ND U	ND U	ND U	ND U	0.013 J	ND U	ND U	0.9	1.8	1.1	1.8	170	--
Benzo(g,h,i)perylene	0.016 J	ND U	ND U	ND U	ND U	ND U	0.027 J	--	--	--	--	--	--
Chrysene	ND U	ND U	ND U	0.036 J	0.054	ND U	0.044	88	--	--	88	17,000	--
Naphthalene	ND U	ND U	ND U	ND U	ND U	ND U	0.015 J	1.8	--	--	170	1.8	--
Phenanthrene	0.088	0.15	0.12	0.13	0.22	0.14	0.16	--	--	--	--	--	--
Inorganics (mg/kg)													
Arsenic	6.8	7.1	7.5	7.3	7.3	7.5	7.6	11.3	13	--	13	61	--
Barium	36	36	33	40	29	36	40	1,500	--	--	5,500	14,000	--
Beryllium	0.71	0.7	0.71	0.77	0.51	0.59	0.67	22	--	--	160	410	--
Boron	18	18	17	20	14	15	17	40	--	--	16,000	41,000	--
Calcium	59,000	60,000	58,000	58,000	61,000	61,000	59,000	--	--	--	--	--	--
Chromium	16	16	16	18	13	15	17	21	--	--	230	690	--
Cobalt	13	13	14	14	13	14	15	20	--	--	4,700	12,000	--
Copper	26	28	28	28	28	27	26	2,900	--	--	2,900	8,200	--
Iron	23,000 †m	24,000 †m	24,000 †m	25,000 †m	16,000 †m	19,000 †m	19,000 †m	15,000	15,900	--	--	--	--
Lead	14	15	15	15	16	14	14	107	--	--	400	700	--
Magnesium	26,000	26,000	24,000	23,000	29,000	25,000	24,000	325,000	--	--	--	730,000	--
Manganese	320	340	320	310	330	340	310	630	636	--	1,600	4,100	--
Mercury	0.02	0.021	0.021	0.021	0.018	0.019 J	0.016 J	0.89	--	--	10	0.1	--
Nickel	34	35	36	36	35	36	38	100	--	--	1,600	4,100	--
Potassium	3,300	3,100	3,000	3,500	2,500	2,700	2,900	--	--	--	--	--	--
Selenium	0.83	0.83	0.81	0.91	0.61	0.76	0.75	1.3	--	--	390	1,000	--
Silver	2.5	2.4	2.3	2.7	1.7	2	2.2	4.4	--	--	390	1,000	--
Sodium	1,200	410	630	210	870	480	210	--	--	--	--	--	--
Thallium	0.98	1.1	1.2	0.9	0.97	0.94	0.9	2.6	--	--	6.3	160	--
Vanadium	21	20	20	23	16	18	20	550	--	--	550	1,400	--
Zinc	49	47	47	59	45	56	52	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)													
Barium	0.67	0.64	0.64	0.63	0.5	0.61	0.66	--	--	--	--	--	2
Boron	0.069 J	0.1 J	0.083 J	0.11 J	0.052 J	0.074 J	0.075 J	--	--	--	--	--	2
Cobalt	0.025	0.02 J	0.014 J	0.016 J	0.039	0.019 J	0.014 J	--	--	--	--	--	1
Iron	ND U	0.32 J	0.22 J	0.31 J	ND U	ND U	ND U	--	--	--	--	--	5
Manganese	2 L	2 L	1.8 L	1.9 L	1.6 L	2 L	1.7 L	--	--	--	--	--	0.15
Mercury	ND U	ND U	ND U	ND U	ND U	ND U	ND U	--	--	--	--	--	0.002
Nickel	0.059	0.049	0.038	0.037	0.086	0.051	0.041	--	--	--	--	--	0.1
SPLP Metals (mg/L)													
Manganese	0.19 L	0.027	0.027	0.04	0.43 L	0.024 J	0.025	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-262 (IDOT Pumping Station #26)								Comparison Criteria					
	2615V2-262-B01								MACs			TACO		
BORING	2615V2-262-B01 (0-5)	2615V2-262-B01 (5-10)	2615V2-262-B01 (10-15)	2615V2-262-B01 (15-23)	2615V2-262-B01 (23-31)	2615V2-262-B01 (31-39)	2615V2-262-B01 (31-39)D	2615V2-262-B01 (39-47)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
MATRIX	0-5	5-10	10-15	15-23	23-31	31-39	31-39	39-47						
DEPTH (feet)	8.1	7.8	7.7	7.9	8	7.5	7.6	7.5						
pH	--													
PID > Bkd														
VOCs (mg/kg)														
Acetone	0.0073	0.034	0.01	0.021	0.012	ND	ND	ND	25	--	--	70,000	100,000	--
Benzene	0.00045	ND	ND	ND	ND	ND	ND	ND	0.03	--	--	0.8	2.2	--
SVOCs (mg/kg)														
2-Methylnaphthalene	0.033	0.03	0.09	0.1	0.058	0.029	0.025	ND	--	--	--	--	--	--
Acenaphthene	0.033	0.05	0.048	0.048	0.037	0.051	0.039	0.044	570	--	--	4,700	120,000	--
Anthracene	0.064	0.024	ND	0.021	ND	ND	ND	ND	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.14	ND	ND	ND	ND	ND	ND	ND	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.13	ND	ND	ND	ND	ND	ND	ND	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.19	ND	ND	ND	ND	ND	ND	ND	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.071	0.016	ND	ND	ND	0.014	ND	0.015	--	--	--	--	--	--
Benzo(k)fluoranthene	0.069	ND	ND	ND	ND	ND	ND	ND	9	--	--	9	1,700	--
Chrysene	0.16	0.029	0.038	0.026	0.017	0.034	ND	0.038	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.024	ND	ND	ND	ND	ND	ND	ND	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND	ND	ND	ND	ND	0.059	ND	ND	--	--	--	--	--	--
Fluoranthene	0.34	0.03	0.035	ND	ND	ND	ND	ND	3,100	--	--	3,100	82,000	--
Fluorene	0.034	ND	ND	0.037	0.034	ND	ND	ND	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.062	ND	ND	ND	ND	ND	ND	ND	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.031	ND	ND	0.052	ND	ND	ND	ND	1.8	--	--	170	1.8	--
Phenanthrene	0.33	0.24	0.21	0.21	0.11	0.3	0.17	0.26	--	--	--	--	--	--
Pyrene	0.32	0.04	0.043	0.038	0.022	0.043	0.03	0.036	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)														
Antimony	0.23	ND	ND	ND	ND	ND	ND	0.26	5	--	--	31	82	0.006
Arsenic	4.6	6.9	6.9	7.2	6.6	11	10	13	11.3	13	--	13	61	0.05
Barium	37	34	41	39	43	18	30	12	1500	--	--	5,500	14,000	2
Beryllium	0.55	0.68	0.7	0.71	0.72	0.48	0.61	0.33	22	--	--	160	410	0.004
Boron	16	17	20	20	20	13	17	9.5	40	--	--	16,000	41,000	2
Cadmium	0.23	0.17	0.16	0.26	0.18	0.26	0.24	0.34	5.2	--	--	78	200	0.005
Calcium	82,000	58,000	57,000	59,000	55,000	53,000	55,000	72,000	--	--	--	--	--	--
Chromium	14	16	17	17	18	11	14	7.2	21	--	--	230	690	0.1
Cobalt	9.5	13	14	13	13	14	15	11	20	--	--	4,700	12,000	1
Copper	23	28	25	27	25	38	33	37	2,900	--	--	2,900	8,200	0.65
Iron	13,000	18,000	19,000	20,000	19,000	19,000	20,000	17,000	15,000	15,900	--	--	--	5
Lead	42	14	13	14	13	19	16	18	107	--	--	400	700	0.0075
Magnesium	44,000	25,000	23,000	23,000	22,000	25,000	25,000	39,000	325,000	--	--	--	730,000	--
Manganese	220	320	320	380	310	360	350	450	630	636	--	1,600	4,100	0.15
Mercury	0.037	0.024	0.022	0.026	0.022	0.031	0.026	0.03	0.89	--	--	10	0.1	0.002
Nickel	24	35	35	34	34	34	37	26	100	--	--	1,600	4,100	0.1
Potassium	2,500	3,200	3,400	3,400	3,300	2,000	2,700	1,300	--	--	--	--	--	--
Selenium	0.41	0.63	ND	0.64	0.48	0.75	0.74	0.88	1.3	--	--	390	1,000	0.05
Silver	1.7	2	2.2	2.3	2.3	1.4	1.8	1.3	4.4	--	--	390	1,000	0.05
Sodium	640	720	370	200	210	140	180	140	--	--	--	--	--	--
Thallium	0.67	0.97	0.96	1.1	1.1	1.2	1.3	1	2.6	--	--	6.3	160	0.002
Vanadium	17	19	21	21	22	14	18	11	550	--	--	550	1,400	0.049
Zinc	58	48	51	72	60	55	58	63	5,100	--	--	23,000	61,000	5
TCLP Metals (mg/L)														
Barium	0.52	0.39	0.6	0.58	0.56	0.3	0.53	0.24	--	--	--	--	--	2
Boron	0.087	0.07	1	0.37	0.1	0.073	1	0.81	--	--	--	--	--	2
Cobalt	0.016	0.011	ND	ND	ND	0.034	0.02	0.041	--	--	--	--	--	1
Lead	0.0077	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	0.0075
Manganese	1.6	1.4	1.5	1.7	1.7	1.8	1.7	2	--	--	--	--	--	0.15
Mercury	ND	ND	ND	ND	ND	ND	0.00046	ND	--	--	--	--	--	0.002
Nickel	0.037	0.03	0.028	0.028	0.025	0.065	0.049	0.076	--	--	--	--	--	0.1
Zinc	0.023	ND	0.08	0.032	ND	ND	0.076	0.076	--	--	--	--	--	5
SPLP Metals (mg/L)														
Lead	0.085	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.36	0.022	0.025	0.053	0.19	0.017	0.044	0.012	--	--	--	--	--	0.15

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-172620-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
11/14/2019 8:32:39 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Job ID: 500-172620-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-172620-1

Receipt

The samples were received on 10/30/2019 5:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

GC/MS VOA

Method 8260B: Internal standard (1,4-Dichlorobenzene-d4) response was outside of acceptance limits for the following samples: 2615VZ-01-B32 (0-6) (500-172620-6). The samples have non-detect for associated analytes for this Internal standard: therefore the results were reported.

Method 8260B: The laboratory control sample and laboratory control sample duplicate (LCS/ LCSD) for 514018 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS/ LCSD and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for three analytes: 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol and Hexachlorocyclopentadiene. Data has been qualified and reported. (500-172620-E-1-G MS) and (500-172620-E-1-H MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

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Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.065	J	0.075	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.021	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.21		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.021	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.089		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.087		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B12 (0-7) (Continued)

Lab Sample ID: 500-172620-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.036	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.063		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.042		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.015	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.47	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	32		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.61		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	1700		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.088	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.034	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.99		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0092	J	0.018	0.0077	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	1.1		0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.57		0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	2.2		0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	1.7		0.20	0.047	mg/Kg	1	☼	8270D	Total/NA
Anthracene	1.6		0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.48		0.20	0.10	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.91		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.90		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.50		0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.22		0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B13 (0-7) (Continued)

Lab Sample ID: 500-172620-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.048		0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.056		0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Fluorene - DL	4.0		0.40	0.056	mg/Kg	10	☼	8270D	Total/NA
Phenanthrene - DL	16		0.40	0.056	mg/Kg	10	☼	8270D	Total/NA
Fluoranthene - DL	7.9		0.40	0.074	mg/Kg	10	☼	8270D	Total/NA
Pyrene - DL	5.4		0.40	0.080	mg/Kg	10	☼	8270D	Total/NA
Antimony	0.58	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.086	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	2700		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.82		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.086	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.045		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.027	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.093		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.010	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.018	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.032	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.59	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.3		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B25 (0-7) (Continued)

Lab Sample ID: 500-172620-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	61000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	14	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	390		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.89		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	870		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.74		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.037		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.043	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.095		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.48	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.0		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.78		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B26 (0-7) (Continued)

Lab Sample ID: 500-172620-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.080	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.093		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.014	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	0.065	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA	
N-Nitrosodiphenylamine	0.052	J	0.20	0.047	mg/Kg	1	☼	8270D	Total/NA	
Phenanthrene	0.11		0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA	
Antimony	0.48	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA	
Arsenic	7.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA	
Barium	40		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.66		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA	
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.089	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA	
Calcium	61000	B	120	20	mg/Kg	10	☼	6010B	Total/NA	
Chromium	16	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA	
Copper	28		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA	
Iron	20000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA	
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	26000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA	
Manganese	350		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA	
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA	
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA	
Selenium	0.75		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA	
Silver	2.3		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA	
Sodium	610		58	8.6	mg/Kg	1	☼	6010B	Total/NA	
Thallium	0.86		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	18		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA	
Zinc	50		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA	
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP	
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP	
Cobalt	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP	
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP	
Nickel	0.029		0.025	0.010	mg/L	1		6010B	TCLP	
Zinc	0.027	J B	0.50	0.020	mg/L	1		6010B	TCLP	
Manganese	0.050		0.025	0.010	mg/L	1		6010B	SPLP East	
Mercury	0.017	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA	
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA	

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.034	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.093		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.017	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.38	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.1		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.092	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	870		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.99		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.056	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.036	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.036	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.027	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.39	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	66000	B	120	20	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)D (Continued)

Lab Sample ID: 500-172620-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	15	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	27000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.86		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.081	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.043	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-172620-2	2615VZ-01-B12 (0-7)	Solid	10/30/19 12:40	10/30/19 17:00	
500-172620-3	2615VZ-01-B13 (0-7)	Solid	10/30/19 12:45	10/30/19 17:00	
500-172620-4	2615VZ-01-B25 (0-7)	Solid	10/30/19 12:55	10/30/19 17:00	
500-172620-5	2615VZ-01-B26 (0-7)	Solid	10/30/19 13:50	10/30/19 17:00	
500-172620-7	2615VZ-01-B33 (0-6)	Solid	10/30/19 14:42	10/30/19 17:00	
500-172620-8	2615VZ-01-B34 (0-6)	Solid	10/30/19 15:10	10/30/19 17:00	
500-172620-9	2615VZ-01-B34 (0-6)D	Solid	10/30/19 15:10	10/30/19 17:00	



Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 131	10/31/19 17:03	11/07/19 15:30	1
Dibromofluoromethane	97		75 - 126	10/31/19 17:03	11/07/19 15:30	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	10/31/19 17:03	11/07/19 15:30	1
Toluene-d8 (Surr)	98		75 - 124	10/31/19 17:03	11/07/19 15:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2-Methylnaphthalene	0.065	J	0.075	0.0068	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Fluorene	0.021	J	0.037	0.0052	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Phenanthrene	0.21		0.037	0.0051	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Anthracene	0.021	J	0.037	0.0062	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Fluoranthene	0.089		0.037	0.0069	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Pyrene	0.087		0.037	0.0073	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Benzo[a]anthracene	0.036	J	0.037	0.0050	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.063		0.037	0.010	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Benzo[b]fluoranthene	0.042		0.037	0.0080	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Indeno[1,2,3-cd]pyrene	0.015 J		0.037	0.0096	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Benzo[g,h,i]perylene	0.014 J		0.037	0.012	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/08/19 07:53	11/12/19 00:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		31 - 166				11/08/19 07:53	11/12/19 00:05	1
Phenol-d5	70		30 - 153				11/08/19 07:53	11/12/19 00:05	1
Nitrobenzene-d5	66		37 - 147				11/08/19 07:53	11/12/19 00:05	1
2-Fluorobiphenyl	75		43 - 145				11/08/19 07:53	11/12/19 00:05	1
2,4,6-Tribromophenol	68		31 - 143				11/08/19 07:53	11/12/19 00:05	1
Terphenyl-d14	80		42 - 157				11/08/19 07:53	11/12/19 00:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47 J		1.1	0.21	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Arsenic	7.8		0.55	0.19	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Barium	39		0.55	0.062	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Beryllium	0.73		0.22	0.051	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Boron	15		2.7	0.25	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Cadmium	0.14 B		0.11	0.020	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Calcium	53000 B		110	19	mg/Kg	☼	11/08/19 17:37	11/12/19 12:23	10
Chromium	16 B		0.55	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Cobalt	14		0.27	0.072	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Copper	32		0.55	0.15	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Iron	19000 B		11	5.7	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Lead	16		0.27	0.13	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Magnesium	22000		5.5	2.7	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Manganese	300		0.55	0.079	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Nickel	37		0.55	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Potassium	3200		27	9.7	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Selenium	0.61		0.55	0.32	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Silver	2.3		0.27	0.071	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Sodium	1700		55	8.1	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Thallium	1.0		0.55	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Vanadium	19		0.27	0.065	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1
Zinc	58		1.1	0.48	mg/Kg	☼	11/08/19 17:37	11/11/19 14:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:14	1
Boron	0.088 J		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:14	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 85.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:14	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:14	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:14	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:14	1
Manganese	2.0		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:14	1
Nickel	0.049		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:14	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:14	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:14	1
Zinc	0.034	J B	0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:14	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.99		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 03:49	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017	0.0058	mg/Kg	☼	11/05/19 14:30	11/06/19 08:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			11/01/19 15:09	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 81.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0092	J	0.018	0.0077	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	10/31/19 17:03	11/07/19 15:55	1
Dibromofluoromethane	98		75 - 126	10/31/19 17:03	11/07/19 15:55	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	10/31/19 17:03	11/07/19 15:55	1
Toluene-d8 (Surr)	96		75 - 124	10/31/19 17:03	11/07/19 15:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Naphthalene	1.1		0.040	0.0062	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2-Methylnaphthalene	0.57		0.081	0.0074	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Acenaphthene	2.2		0.040	0.0072	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Dibenzofuran	1.7		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Anthracene	1.6		0.040	0.0067	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Carbazole	0.48		0.20	0.10	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Benzo[a]anthracene	0.91		0.040	0.0054	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Chrysene	0.90		0.040	0.011	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	0.50		0.040	0.0087	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Benzo[a]pyrene	0.22		0.040	0.0078	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Indeno[1,2,3-cd]pyrene	0.048		0.040	0.010	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
Benzo[g,h,i]perylene	0.056		0.040	0.013	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/12/19 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	82		31 - 166	11/08/19 07:53	11/12/19 00:32	1
Phenol-d5	74		30 - 153	11/08/19 07:53	11/12/19 00:32	1
Nitrobenzene-d5	66		37 - 147	11/08/19 07:53	11/12/19 00:32	1
2-Fluorobiphenyl	80		43 - 145	11/08/19 07:53	11/12/19 00:32	1
2,4,6-Tribromophenol	77		31 - 143	11/08/19 07:53	11/12/19 00:32	1
Terphenyl-d14	83		42 - 157	11/08/19 07:53	11/12/19 00:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.0		0.40	0.056	mg/Kg	☼	11/08/19 07:53	11/13/19 13:32	10
Phenanthrene	16		0.40	0.056	mg/Kg	☼	11/08/19 07:53	11/13/19 13:32	10
Fluoranthene	7.9		0.40	0.074	mg/Kg	☼	11/08/19 07:53	11/13/19 13:32	10
Pyrene	5.4		0.40	0.080	mg/Kg	☼	11/08/19 07:53	11/13/19 13:32	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.1	0.22	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Arsenic	7.5		0.57	0.20	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Barium	39		0.57	0.065	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Beryllium	0.67		0.23	0.053	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Boron	14		2.9	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Cadmium	0.086	J B	0.11	0.021	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Calcium	56000	B	110	19	mg/Kg	☼	11/08/19 17:37	11/12/19 12:27	10
Chromium	15	B	0.57	0.28	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Cobalt	14		0.29	0.075	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Copper	27		0.57	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Iron	19000	B	11	6.0	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Lead	15		0.29	0.13	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Magnesium	23000		5.7	2.8	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Manganese	320		0.57	0.083	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Nickel	35		0.57	0.17	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Potassium	2900		29	10	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Selenium	0.63		0.57	0.34	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Silver	2.2		0.29	0.074	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Sodium	2700		57	8.5	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Thallium	0.82		0.57	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Vanadium	17		0.29	0.068	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1
Zinc	50		1.1	0.50	mg/Kg	☼	11/08/19 17:37	11/11/19 14:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 81.7

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:18	1
Boron	0.086	J	0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:18	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:18	1
Cobalt	0.015	J	0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:18	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:18	1
Manganese	2.0		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:18	1
Nickel	0.045		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:18	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:18	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:18	1
Zinc	<0.50		0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.0		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 04:01	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:21	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.020	0.0066	mg/Kg	☼	11/05/19 14:30	11/06/19 08:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			11/01/19 15:14	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Date Collected: 10/30/19 12:55

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	10/31/19 17:03	11/07/19 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	10/31/19 17:03	11/07/19 16:21	1
Dibromofluoromethane	96		75 - 126	10/31/19 17:03	11/07/19 16:21	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	10/31/19 17:03	11/07/19 16:21	1
Toluene-d8 (Surr)	98		75 - 124	10/31/19 17:03	11/07/19 16:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Date Collected: 10/30/19 12:55

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2-Methylnaphthalene	0.027	J	0.080	0.0073	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Phenanthrene	0.093		0.039	0.0055	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Fluoranthene	0.010	J	0.039	0.0073	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Pyrene	0.018	J	0.039	0.0078	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Benzo[a]anthracene	0.032	J	0.039	0.0053	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Date Collected: 10/30/19 12:55

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/08/19 07:53	11/12/19 00:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		31 - 166				11/08/19 07:53	11/12/19 00:59	1
Phenol-d5	64		30 - 153				11/08/19 07:53	11/12/19 00:59	1
Nitrobenzene-d5	61		37 - 147				11/08/19 07:53	11/12/19 00:59	1
2-Fluorobiphenyl	70		43 - 145				11/08/19 07:53	11/12/19 00:59	1
2,4,6-Tribromophenol	69		31 - 143				11/08/19 07:53	11/12/19 00:59	1
Terphenyl-d14	78		42 - 157				11/08/19 07:53	11/12/19 00:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.1	0.22	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Arsenic	9.3		0.57	0.20	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Barium	35		0.57	0.065	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Beryllium	0.62		0.23	0.053	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Boron	14		2.9	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Cadmium	0.11	B	0.11	0.021	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Calcium	61000	B	110	19	mg/Kg	☼	11/08/19 17:37	11/12/19 12:32	10
Chromium	14	B	0.57	0.28	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Cobalt	13		0.29	0.075	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Copper	33		0.57	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Iron	22000	B	11	5.9	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Lead	15		0.29	0.13	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Magnesium	26000		5.7	2.8	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Manganese	390		0.57	0.083	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Nickel	35		0.57	0.17	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Potassium	2600		29	10	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Selenium	0.89		0.57	0.34	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Silver	2.1		0.29	0.074	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Sodium	870		57	8.5	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Thallium	0.74		0.57	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Vanadium	17		0.29	0.067	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1
Zinc	48		1.1	0.50	mg/Kg	☼	11/08/19 17:37	11/11/19 15:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:22	1
Boron	0.10	J	0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Date Collected: 10/30/19 12:55

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:22	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:22	1
Cobalt	0.012	J	0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:22	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:22	1
Manganese	2.0		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:22	1
Nickel	0.033		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:22	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:22	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:22	1
Zinc	0.18	J B	0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:22	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.037		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 04:05	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:25	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.018	0.0060	mg/Kg	☼	11/05/19 14:30	11/06/19 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			11/01/19 15:20	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Chloroethane	<0.0042 *		0.0042	0.0012	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	10/31/19 17:03	11/07/19 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 131	10/31/19 17:03	11/07/19 16:46	1
Dibromofluoromethane	98		75 - 126	10/31/19 17:03	11/07/19 16:46	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	10/31/19 17:03	11/07/19 16:46	1
Toluene-d8 (Surr)	96		75 - 124	10/31/19 17:03	11/07/19 16:46	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2-Methylnaphthalene	0.043	J	0.080	0.0073	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Phenanthrene	0.095		0.039	0.0055	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.039	0.011	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/08/19 07:53	11/12/19 01:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		31 - 166				11/08/19 07:53	11/12/19 01:26	1
Phenol-d5	71		30 - 153				11/08/19 07:53	11/12/19 01:26	1
Nitrobenzene-d5	67		37 - 147				11/08/19 07:53	11/12/19 01:26	1
2-Fluorobiphenyl	78		43 - 145				11/08/19 07:53	11/12/19 01:26	1
2,4,6-Tribromophenol	70		31 - 143				11/08/19 07:53	11/12/19 01:26	1
Terphenyl-d14	92		42 - 157				11/08/19 07:53	11/12/19 01:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.1	0.22	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Arsenic	7.0		0.57	0.20	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Barium	45		0.57	0.065	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Beryllium	0.66		0.23	0.054	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Boron	17		2.9	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Cadmium	0.090	J B	0.11	0.021	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Calcium	58000	B	110	19	mg/Kg	☼	11/08/19 17:37	11/12/19 12:36	10
Chromium	17	B	0.57	0.28	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Cobalt	13		0.29	0.075	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Copper	26		0.57	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Iron	20000	B	11	6.0	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Lead	19		0.29	0.13	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Magnesium	24000		5.7	2.8	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Manganese	330		0.57	0.083	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Nickel	35		0.57	0.17	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Potassium	3200		29	10	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Silver	2.5		0.29	0.074	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Sodium	1200		57	8.5	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Thallium	0.78		0.57	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Vanadium	20		0.29	0.068	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1
Zinc	57		1.1	0.50	mg/Kg	☼	11/08/19 17:37	11/11/19 15:07	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:27	1
Boron	0.080	J	0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:27	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:27	1
Cobalt	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:27	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:27	1
Manganese	1.8		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:27	1
Nickel	0.028		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:27	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:27	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:27	1
Zinc	<0.50		0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.093		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 04:09	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.018	0.0061	mg/Kg	☼	11/05/19 14:30	11/06/19 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/01/19 15:26	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Date Collected: 10/30/19 14:42

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	10/31/19 17:03	11/07/19 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	10/31/19 17:03	11/07/19 17:36	1
Dibromofluoromethane	99		75 - 126	10/31/19 17:03	11/07/19 17:36	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	10/31/19 17:03	11/07/19 17:36	1
Toluene-d8 (Surr)	96		75 - 124	10/31/19 17:03	11/07/19 17:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Date Collected: 10/30/19 14:42

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2-Methylnaphthalene	0.065	J	0.080	0.0073	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
N-Nitrosodiphenylamine	0.052	J	0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Phenanthrene	0.11		0.040	0.0055	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Date Collected: 10/30/19 14:42

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/08/19 07:53	11/12/19 02:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		31 - 166	11/08/19 07:53	11/12/19 02:20	1
Phenol-d5	73		30 - 153	11/08/19 07:53	11/12/19 02:20	1
Nitrobenzene-d5	65		37 - 147	11/08/19 07:53	11/12/19 02:20	1
2-Fluorobiphenyl	82		43 - 145	11/08/19 07:53	11/12/19 02:20	1
2,4,6-Tribromophenol	74		31 - 143	11/08/19 07:53	11/12/19 02:20	1
Terphenyl-d14	99		42 - 157	11/08/19 07:53	11/12/19 02:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.2	0.23	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Arsenic	7.9		0.58	0.20	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Barium	40		0.58	0.066	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Beryllium	0.66		0.23	0.054	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Boron	15		2.9	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Cadmium	0.089	J B	0.12	0.021	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Calcium	61000	B	120	20	mg/Kg	☼	11/08/19 17:37	11/12/19 12:44	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Cobalt	14		0.29	0.076	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Copper	28		0.58	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Iron	20000	B	12	6.0	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Lead	14		0.29	0.13	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Magnesium	26000		5.8	2.9	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Manganese	350		0.58	0.084	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Nickel	36		0.58	0.17	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Potassium	2900		29	10	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Selenium	0.75		0.58	0.34	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Silver	2.3		0.29	0.075	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Sodium	610		58	8.6	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Thallium	0.86		0.58	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Vanadium	18		0.29	0.068	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1
Zinc	50		1.2	0.51	mg/Kg	☼	11/08/19 17:37	11/11/19 15:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:35	1
Boron	0.082	J	0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Date Collected: 10/30/19 14:42

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:35	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:35	1
Cobalt	0.010	J	0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:35	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:35	1
Manganese	1.9		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:35	1
Nickel	0.029		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:35	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:35	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:35	1
Zinc	0.027	J B	0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:35	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.050		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 04:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:36	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.018	0.0061	mg/Kg	☼	11/05/19 14:30	11/06/19 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			11/01/19 15:38	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Vinyl acetate	<0.0045		0.0045	0.0015	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 131	10/31/19 17:03	11/07/19 18:01	1
Dibromofluoromethane	101		75 - 126	10/31/19 17:03	11/07/19 18:01	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	10/31/19 17:03	11/07/19 18:01	1
Toluene-d8 (Surr)	95		75 - 124	10/31/19 17:03	11/07/19 18:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2-Methylnaphthalene	0.034	J	0.079	0.0072	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Phenanthrene	0.093		0.039	0.0055	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Pyrene	0.017	J	0.039	0.0078	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.039	0.011	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Benzo[g,h,i]perylene	0.022	J	0.039	0.013	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/08/19 07:53	11/08/19 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		31 - 166				11/08/19 07:53	11/08/19 19:43	1
Phenol-d5	66		30 - 153				11/08/19 07:53	11/08/19 19:43	1
Nitrobenzene-d5	69		37 - 147				11/08/19 07:53	11/08/19 19:43	1
2-Fluorobiphenyl	83		43 - 145				11/08/19 07:53	11/08/19 19:43	1
2,4,6-Tribromophenol	89		31 - 143				11/08/19 07:53	11/08/19 19:43	1
Terphenyl-d14	86		42 - 157				11/08/19 07:53	11/08/19 19:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.2	0.23	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Arsenic	7.1		0.59	0.20	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Barium	41		0.59	0.067	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Beryllium	0.64		0.24	0.055	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Boron	15		2.9	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Cadmium	0.092	J B	0.12	0.021	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Calcium	59000	B	120	20	mg/Kg	☼	11/08/19 17:37	11/12/19 13:01	10
Chromium	15	B	0.59	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Cobalt	13		0.29	0.077	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Copper	25		0.59	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Iron	20000	B	12	6.1	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Lead	13		0.29	0.14	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Magnesium	24000		5.9	2.9	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Manganese	350		0.59	0.085	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Nickel	34		0.59	0.17	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Potassium	2900		29	10	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Selenium	0.37	J	0.59	0.35	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Silver	2.3		0.29	0.076	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Sodium	870		59	8.7	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Thallium	0.99		0.59	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Vanadium	18		0.29	0.069	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1
Zinc	51		1.2	0.52	mg/Kg	☼	11/08/19 17:37	11/11/19 15:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:39	1
Boron	0.11	J	0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:39	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:39	1
Cobalt	0.010	J	0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:39	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:39	1
Manganese	2.0		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:39	1
Nickel	0.030		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:39	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:39	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:39	1
Zinc	0.056	J B	0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:39	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		11/03/19 17:02	11/05/19 04:21	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:48	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.018	0.0061	mg/Kg	☼	11/05/19 14:30	11/06/19 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/01/19 15:44	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	10/31/19 17:03	11/07/19 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	10/31/19 17:03	11/07/19 18:27	1
Dibromofluoromethane	98		75 - 126	10/31/19 17:03	11/07/19 18:27	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	10/31/19 17:03	11/07/19 18:27	1
Toluene-d8 (Surr)	97		75 - 124	10/31/19 17:03	11/07/19 18:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2-Methylnaphthalene	0.036	J	0.078	0.0071	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Phenanthrene	0.15		0.038	0.0054	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Benzof[anthracene	<0.038		0.038	0.0052	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	J	0.038	0.011	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Benzo[g,h,i]perylene	0.027	J	0.038	0.012	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/08/19 07:53	11/08/19 20:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				11/08/19 07:53	11/08/19 20:08	1
Phenol-d5	65		30 - 153				11/08/19 07:53	11/08/19 20:08	1
Nitrobenzene-d5	65		37 - 147				11/08/19 07:53	11/08/19 20:08	1
2-Fluorobiphenyl	80		43 - 145				11/08/19 07:53	11/08/19 20:08	1
2,4,6-Tribromophenol	99		31 - 143				11/08/19 07:53	11/08/19 20:08	1
Terphenyl-d14	93		42 - 157				11/08/19 07:53	11/08/19 20:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.2	0.23	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Arsenic	7.6		0.58	0.20	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Barium	36		0.58	0.066	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Beryllium	0.61		0.23	0.054	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Boron	15		2.9	0.27	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Cadmium	0.11	J B	0.12	0.021	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Calcium	66000	B	120	20	mg/Kg	☼	11/08/19 17:37	11/12/19 13:05	10
Chromium	15	B	0.58	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Cobalt	13		0.29	0.076	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Copper	28		0.58	0.16	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Iron	19000	B	12	6.0	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Lead	14		0.29	0.13	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Magnesium	27000		5.8	2.9	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Manganese	350		0.58	0.084	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Nickel	34		0.58	0.17	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Potassium	2800		29	10	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Silver	2.2		0.29	0.075	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Sodium	1400		58	8.6	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Thallium	0.86		0.58	0.29	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Vanadium	17		0.29	0.068	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1
Zinc	47		1.2	0.51	mg/Kg	☼	11/08/19 17:37	11/11/19 15:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:52	1
Boron	0.081	J	0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:52	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:52	1
Cobalt	0.011	J	0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:52	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:52	1
Manganese	2.1		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:52	1
Nickel	0.031		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:52	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:52	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:52	1
Zinc	0.043	J B	0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 04:26	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:51	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.018	0.0059	mg/Kg	☼	11/05/19 14:30	11/06/19 08:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			11/01/19 15:49	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

GC/MS VOA

Prep Batch: 513307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	5035	
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	5035	
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	5035	
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	5035	
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	5035	
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	5035	
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	5035	
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	5035	
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	5035	

Analysis Batch: 514018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	8260B	513307
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	8260B	513307
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	8260B	513307
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	8260B	513307
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	8260B	513307
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	8260B	513307
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	8260B	513307
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	8260B	513307
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	8260B	513307
MB 500-514018/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-514018/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-514018/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 514279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	3541	
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	3541	
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	3541	
500-172620-3 - DL	2615VZ-01-B13 (0-7)	Total/NA	Solid	3541	
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	3541	
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	3541	
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	3541	
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	3541	
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	3541	
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	3541	
MB 500-514279/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-514279/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-172620-1 MS	2615VZ-01-B11 (0-6)	Total/NA	Solid	3541	
500-172620-1 MSD	2615VZ-01-B11 (0-6)	Total/NA	Solid	3541	

Analysis Batch: 514295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	8270D	514279
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	8270D	514279

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

GC/MS Semi VOA

Analysis Batch: 514425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-514279/1-A	Method Blank	Total/NA	Solid	8270D	514279
LCS 500-514279/2-A	Lab Control Sample	Total/NA	Solid	8270D	514279

Analysis Batch: 514681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	8270D	514279
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	8270D	514279
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	8270D	514279
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	8270D	514279
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	8270D	514279
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	8270D	514279
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	8270D	514279

Analysis Batch: 514979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1 MS	2615VZ-01-B11 (0-6)	Total/NA	Solid	8270D	514279
500-172620-1 MSD	2615VZ-01-B11 (0-6)	Total/NA	Solid	8270D	514279

Analysis Batch: 515067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-3 - DL	2615VZ-01-B13 (0-7)	Total/NA	Solid	8270D	514279

Metals

Leach Batch: 513113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	SPLP East	Solid	1312	
500-172620-2	2615VZ-01-B12 (0-7)	SPLP East	Solid	1312	
500-172620-3	2615VZ-01-B13 (0-7)	SPLP East	Solid	1312	
500-172620-4	2615VZ-01-B25 (0-7)	SPLP East	Solid	1312	
500-172620-5	2615VZ-01-B26 (0-7)	SPLP East	Solid	1312	
500-172620-6	2615VZ-01-B32 (0-6)	SPLP East	Solid	1312	
500-172620-7	2615VZ-01-B33 (0-6)	SPLP East	Solid	1312	
500-172620-8	2615VZ-01-B34 (0-6)	SPLP East	Solid	1312	
500-172620-9	2615VZ-01-B34 (0-6)D	SPLP East	Solid	1312	
LB 500-513113/1-B	Method Blank	SPLP East	Solid	1312	

Leach Batch: 513114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	TCLP	Solid	1311	
500-172620-2	2615VZ-01-B12 (0-7)	TCLP	Solid	1311	
500-172620-3	2615VZ-01-B13 (0-7)	TCLP	Solid	1311	
500-172620-4	2615VZ-01-B25 (0-7)	TCLP	Solid	1311	
500-172620-5	2615VZ-01-B26 (0-7)	TCLP	Solid	1311	
500-172620-6	2615VZ-01-B32 (0-6)	TCLP	Solid	1311	
500-172620-7	2615VZ-01-B33 (0-6)	TCLP	Solid	1311	
500-172620-8	2615VZ-01-B34 (0-6)	TCLP	Solid	1311	
500-172620-9	2615VZ-01-B34 (0-6)D	TCLP	Solid	1311	
LB 500-513114/1-B	Method Blank	TCLP	Solid	1311	
LB 500-513114/1-C	Method Blank	TCLP	Solid	1311	
500-172620-6 MS	2615VZ-01-B32 (0-6)	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Metals (Continued)

Leach Batch: 513114 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-9 MS	2615VZ-01-B34 (0-6)D	TCLP	Solid	1311	
500-172620-6 DU	2615VZ-01-B32 (0-6)	TCLP	Solid	1311	
500-172620-9 DU	2615VZ-01-B34 (0-6)D	TCLP	Solid	1311	

Prep Batch: 513280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	SPLP East	Solid	3010A	513113
500-172620-2	2615VZ-01-B12 (0-7)	SPLP East	Solid	3010A	513113
500-172620-3	2615VZ-01-B13 (0-7)	SPLP East	Solid	3010A	513113
500-172620-4	2615VZ-01-B25 (0-7)	SPLP East	Solid	3010A	513113
500-172620-5	2615VZ-01-B26 (0-7)	SPLP East	Solid	3010A	513113
500-172620-6	2615VZ-01-B32 (0-6)	SPLP East	Solid	3010A	513113
500-172620-7	2615VZ-01-B33 (0-6)	SPLP East	Solid	3010A	513113
500-172620-8	2615VZ-01-B34 (0-6)	SPLP East	Solid	3010A	513113
500-172620-9	2615VZ-01-B34 (0-6)D	SPLP East	Solid	3010A	513113
LB 500-513113/1-B	Method Blank	SPLP East	Solid	3010A	513113
LCS 500-513280/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 513281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	TCLP	Solid	3010A	513114
500-172620-2	2615VZ-01-B12 (0-7)	TCLP	Solid	3010A	513114
500-172620-3	2615VZ-01-B13 (0-7)	TCLP	Solid	3010A	513114
500-172620-4	2615VZ-01-B25 (0-7)	TCLP	Solid	3010A	513114
500-172620-5	2615VZ-01-B26 (0-7)	TCLP	Solid	3010A	513114
500-172620-6	2615VZ-01-B32 (0-6)	TCLP	Solid	3010A	513114
500-172620-7	2615VZ-01-B33 (0-6)	TCLP	Solid	3010A	513114
500-172620-8	2615VZ-01-B34 (0-6)	TCLP	Solid	3010A	513114
500-172620-9	2615VZ-01-B34 (0-6)D	TCLP	Solid	3010A	513114
LB 500-513114/1-B	Method Blank	TCLP	Solid	3010A	513114
LCS 500-513281/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-172620-9 MS	2615VZ-01-B34 (0-6)D	TCLP	Solid	3010A	513114
500-172620-9 DU	2615VZ-01-B34 (0-6)D	TCLP	Solid	3010A	513114

Analysis Batch: 513472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	TCLP	Solid	6020A	513281
500-172620-2	2615VZ-01-B12 (0-7)	TCLP	Solid	6020A	513281
500-172620-3	2615VZ-01-B13 (0-7)	TCLP	Solid	6020A	513281
500-172620-4	2615VZ-01-B25 (0-7)	TCLP	Solid	6020A	513281
500-172620-5	2615VZ-01-B26 (0-7)	TCLP	Solid	6020A	513281
500-172620-6	2615VZ-01-B32 (0-6)	TCLP	Solid	6020A	513281
500-172620-7	2615VZ-01-B33 (0-6)	TCLP	Solid	6020A	513281
500-172620-8	2615VZ-01-B34 (0-6)	TCLP	Solid	6020A	513281
500-172620-9	2615VZ-01-B34 (0-6)D	TCLP	Solid	6020A	513281
LB 500-513114/1-B	Method Blank	TCLP	Solid	6020A	513281
LCS 500-513281/2-A	Lab Control Sample	Total/NA	Solid	6020A	513281
500-172620-9 MS	2615VZ-01-B34 (0-6)D	TCLP	Solid	6020A	513281
500-172620-9 DU	2615VZ-01-B34 (0-6)D	TCLP	Solid	6020A	513281

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Metals

Analysis Batch: 513530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	TCLP	Solid	6010B	513281
500-172620-2	2615VZ-01-B12 (0-7)	TCLP	Solid	6010B	513281
500-172620-3	2615VZ-01-B13 (0-7)	TCLP	Solid	6010B	513281
500-172620-4	2615VZ-01-B25 (0-7)	TCLP	Solid	6010B	513281
500-172620-5	2615VZ-01-B26 (0-7)	TCLP	Solid	6010B	513281
500-172620-6	2615VZ-01-B32 (0-6)	TCLP	Solid	6010B	513281
500-172620-7	2615VZ-01-B33 (0-6)	TCLP	Solid	6010B	513281
500-172620-8	2615VZ-01-B34 (0-6)	TCLP	Solid	6010B	513281
500-172620-9	2615VZ-01-B34 (0-6)D	TCLP	Solid	6010B	513281
LB 500-513114/1-B	Method Blank	TCLP	Solid	6010B	513281
LCS 500-513281/2-A	Lab Control Sample	Total/NA	Solid	6010B	513281
500-172620-9 MS	2615VZ-01-B34 (0-6)D	TCLP	Solid	6010B	513281
500-172620-9 DU	2615VZ-01-B34 (0-6)D	TCLP	Solid	6010B	513281

Analysis Batch: 513587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	SPLP East	Solid	6010B	513280
500-172620-2	2615VZ-01-B12 (0-7)	SPLP East	Solid	6010B	513280
500-172620-3	2615VZ-01-B13 (0-7)	SPLP East	Solid	6010B	513280
500-172620-4	2615VZ-01-B25 (0-7)	SPLP East	Solid	6010B	513280
500-172620-5	2615VZ-01-B26 (0-7)	SPLP East	Solid	6010B	513280
500-172620-6	2615VZ-01-B32 (0-6)	SPLP East	Solid	6010B	513280
500-172620-7	2615VZ-01-B33 (0-6)	SPLP East	Solid	6010B	513280
500-172620-8	2615VZ-01-B34 (0-6)	SPLP East	Solid	6010B	513280
500-172620-9	2615VZ-01-B34 (0-6)D	SPLP East	Solid	6010B	513280
LB 500-513113/1-B	Method Blank	SPLP East	Solid	6010B	513280
LCS 500-513280/2-A	Lab Control Sample	Total/NA	Solid	6010B	513280

Prep Batch: 513620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	TCLP	Solid	7470A	513114
500-172620-2	2615VZ-01-B12 (0-7)	TCLP	Solid	7470A	513114
500-172620-3	2615VZ-01-B13 (0-7)	TCLP	Solid	7470A	513114
500-172620-4	2615VZ-01-B25 (0-7)	TCLP	Solid	7470A	513114
500-172620-5	2615VZ-01-B26 (0-7)	TCLP	Solid	7470A	513114
500-172620-6	2615VZ-01-B32 (0-6)	TCLP	Solid	7470A	513114
500-172620-7	2615VZ-01-B33 (0-6)	TCLP	Solid	7470A	513114
500-172620-8	2615VZ-01-B34 (0-6)	TCLP	Solid	7470A	513114
500-172620-9	2615VZ-01-B34 (0-6)D	TCLP	Solid	7470A	513114
LB 500-513114/1-C	Method Blank	TCLP	Solid	7470A	513114
MB 500-513620/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-513620/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-172620-6 MS	2615VZ-01-B32 (0-6)	TCLP	Solid	7470A	513114
500-172620-6 DU	2615VZ-01-B32 (0-6)	TCLP	Solid	7470A	513114

Prep Batch: 513628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	7471B	
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	7471B	
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	7471B	
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	7471B	

Eurolins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Metals (Continued)

Prep Batch: 513628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	7471B	
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	7471B	
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	7471B	
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	7471B	
MB 500-513628/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-513628/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-172620-5 MS	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	
500-172620-5 MSD	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	
500-172620-5 DU	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	

Analysis Batch: 513874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	7471B	513628
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	7471B	513628
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	7471B	513628
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	7471B	513628
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	513628
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	7471B	513628
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	7471B	513628
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	7471B	513628
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	7471B	513628
MB 500-513628/12-A	Method Blank	Total/NA	Solid	7471B	513628
LCS 500-513628/13-A	Lab Control Sample	Total/NA	Solid	7471B	513628
500-172620-5 MS	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	513628
500-172620-5 MSD	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	513628
500-172620-5 DU	2615VZ-01-B26 (0-7)	Total/NA	Solid	7471B	513628

Analysis Batch: 513885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	TCLP	Solid	7470A	513620
500-172620-2	2615VZ-01-B12 (0-7)	TCLP	Solid	7470A	513620
500-172620-3	2615VZ-01-B13 (0-7)	TCLP	Solid	7470A	513620
500-172620-4	2615VZ-01-B25 (0-7)	TCLP	Solid	7470A	513620
500-172620-5	2615VZ-01-B26 (0-7)	TCLP	Solid	7470A	513620
500-172620-6	2615VZ-01-B32 (0-6)	TCLP	Solid	7470A	513620
500-172620-7	2615VZ-01-B33 (0-6)	TCLP	Solid	7470A	513620
500-172620-8	2615VZ-01-B34 (0-6)	TCLP	Solid	7470A	513620
500-172620-9	2615VZ-01-B34 (0-6)D	TCLP	Solid	7470A	513620
LB 500-513114/1-C	Method Blank	TCLP	Solid	7470A	513620
MB 500-513620/12-A	Method Blank	Total/NA	Solid	7470A	513620
LCS 500-513620/13-A	Lab Control Sample	Total/NA	Solid	7470A	513620
500-172620-6 MS	2615VZ-01-B32 (0-6)	TCLP	Solid	7470A	513620
500-172620-6 DU	2615VZ-01-B32 (0-6)	TCLP	Solid	7470A	513620

Prep Batch: 514424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	3050B	
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	3050B	
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	3050B	
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Metals (Continued)

Prep Batch: 514424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	3050B	
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	3050B	
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	3050B	
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	3050B	
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	3050B	
MB 500-514424/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-514424/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 514791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	6010B	514424
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	6010B	514424
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	6010B	514424
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	6010B	514424
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	6010B	514424
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	6010B	514424
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	6010B	514424
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	6010B	514424
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	6010B	514424
MB 500-514424/1-A	Method Blank	Total/NA	Solid	6010B	514424
LCS 500-514424/2-A	Lab Control Sample	Total/NA	Solid	6010B	514424

Analysis Batch: 514944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	6010B	514424
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	6010B	514424
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	6010B	514424
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	6010B	514424
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	6010B	514424
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	6010B	514424
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	6010B	514424
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	6010B	514424
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	6010B	514424

General Chemistry

Analysis Batch: 513042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	Moisture	
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	Moisture	
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	Moisture	
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	Moisture	
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	Moisture	
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	Moisture	
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	Moisture	
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	Moisture	
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	Moisture	

Analysis Batch: 513077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-1	2615VZ-01-B11 (0-6)	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

General Chemistry (Continued)

Analysis Batch: 513077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172620-2	2615VZ-01-B12 (0-7)	Total/NA	Solid	9045D	
500-172620-3	2615VZ-01-B13 (0-7)	Total/NA	Solid	9045D	
500-172620-4	2615VZ-01-B25 (0-7)	Total/NA	Solid	9045D	
500-172620-5	2615VZ-01-B26 (0-7)	Total/NA	Solid	9045D	
500-172620-6	2615VZ-01-B32 (0-6)	Total/NA	Solid	9045D	
500-172620-7	2615VZ-01-B33 (0-6)	Total/NA	Solid	9045D	
500-172620-8	2615VZ-01-B34 (0-6)	Total/NA	Solid	9045D	
500-172620-9	2615VZ-01-B34 (0-6)D	Total/NA	Solid	9045D	
LCS 500-513077/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-513077/6	Lab Control Sample Dup	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-172620-1	2615VZ-01-B11 (0-6)	97	97	94	96
500-172620-2	2615VZ-01-B12 (0-7)	97	97	96	98
500-172620-3	2615VZ-01-B13 (0-7)	92	98	94	96
500-172620-4	2615VZ-01-B25 (0-7)	93	96	91	98
500-172620-5	2615VZ-01-B26 (0-7)	94	98	95	96
500-172620-6	2615VZ-01-B32 (0-6)	123 *	100	94	107
500-172620-7	2615VZ-01-B33 (0-6)	96	99	92	96
500-172620-8	2615VZ-01-B34 (0-6)	95	101	94	95
500-172620-9	2615VZ-01-B34 (0-6)D	93	98	92	97
LCS 500-514018/4	Lab Control Sample	85	97	90	92
LCSD 500-514018/8	Lab Control Sample Dup	85	97	89	92
MB 500-514018/6	Method Blank	90	94	88	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-172620-1	2615VZ-01-B11 (0-6)	92	79	77	86	79	94
500-172620-1 MS	2615VZ-01-B11 (0-6)	70	68	59	67	66	81
500-172620-1 MSD	2615VZ-01-B11 (0-6)	81	82	72	79	77	101
500-172620-2	2615VZ-01-B12 (0-7)	83	70	66	75	68	80
500-172620-3	2615VZ-01-B13 (0-7)	82	74	66	80	77	83
500-172620-3 - DL	2615VZ-01-B13 (0-7)	97	92	92	111	86	122
500-172620-4	2615VZ-01-B25 (0-7)	78	64	61	70	69	78
500-172620-5	2615VZ-01-B26 (0-7)	81	71	67	78	70	92
500-172620-6	2615VZ-01-B32 (0-6)	80	67	62	73	73	88
500-172620-7	2615VZ-01-B33 (0-6)	84	73	65	82	74	99
500-172620-8	2615VZ-01-B34 (0-6)	60	66	69	83	89	86
500-172620-9	2615VZ-01-B34 (0-6)D	59	65	65	80	99	93
LCS 500-514279/2-A	Lab Control Sample	89	81	85	99	112	95
MB 500-514279/1-A	Method Blank	83	76	79	90	72	95

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-514018/6
Matrix: Solid
Analysis Batch: 514018

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			11/07/19 10:48	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/07/19 10:48	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/07/19 10:48	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/07/19 10:48	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/07/19 10:48	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/07/19 10:48	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/07/19 10:48	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/07/19 10:48	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/07/19 10:48	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/07/19 10:48	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/07/19 10:48	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/07/19 10:48	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/07/19 10:48	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/07/19 10:48	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/07/19 10:48	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/07/19 10:48	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/07/19 10:48	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/07/19 10:48	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/07/19 10:48	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/07/19 10:48	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/07/19 10:48	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/07/19 10:48	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/07/19 10:48	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/07/19 10:48	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/07/19 10:48	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/07/19 10:48	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/07/19 10:48	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/07/19 10:48	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/07/19 10:48	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/07/19 10:48	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/07/19 10:48	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/07/19 10:48	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/07/19 10:48	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/07/19 10:48	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/07/19 10:48	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/07/19 10:48	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/07/19 10:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131		11/07/19 10:48	1
Dibromofluoromethane	94		75 - 126		11/07/19 10:48	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134		11/07/19 10:48	1
Toluene-d8 (Surr)	95		75 - 124		11/07/19 10:48	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514018/4
Matrix: Solid
Analysis Batch: 514018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0406		mg/Kg		81	40 - 150
Benzene	0.0500	0.0482		mg/Kg		96	70 - 125
Bromodichloromethane	0.0500	0.0444		mg/Kg		89	67 - 129
Bromoform	0.0500	0.0461		mg/Kg		92	68 - 136
Bromomethane	0.0500	0.0525		mg/Kg		105	70 - 130
2-Butanone (MEK)	0.0500	0.0354		mg/Kg		71	47 - 138
Carbon disulfide	0.0500	0.0532		mg/Kg		106	70 - 129
Carbon tetrachloride	0.0500	0.0476		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0457		mg/Kg		91	50 - 150
Chloroethane	0.0500	0.0654	*	mg/Kg		131	75 - 125
Chloroform	0.0500	0.0464		mg/Kg		93	57 - 135
Chloromethane	0.0500	0.0438		mg/Kg		88	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0495		mg/Kg		99	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125
Dibromochloromethane	0.0500	0.0438		mg/Kg		88	69 - 125
1,1-Dichloroethane	0.0500	0.0492		mg/Kg		98	70 - 125
1,2-Dichloroethane	0.0500	0.0467		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0500	0.0500		mg/Kg		100	70 - 120
1,2-Dichloropropane	0.0500	0.0485		mg/Kg		97	70 - 125
Ethylbenzene	0.0500	0.0450		mg/Kg		90	61 - 136
2-Hexanone	0.0500	0.0402		mg/Kg		80	48 - 146
Methylene Chloride	0.0500	0.0470		mg/Kg		94	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0381		mg/Kg		76	50 - 148
Methyl tert-butyl ether	0.0500	0.0474		mg/Kg		95	50 - 140
Styrene	0.0500	0.0434		mg/Kg		87	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0454		mg/Kg		91	70 - 122
Tetrachloroethene	0.0500	0.0490		mg/Kg		98	70 - 124
Toluene	0.0500	0.0441		mg/Kg		88	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0501		mg/Kg		100	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0421		mg/Kg		84	70 - 125
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 128
1,1,2-Trichloroethane	0.0500	0.0451		mg/Kg		90	70 - 125
Trichloroethene	0.0500	0.0496		mg/Kg		99	70 - 125
Vinyl acetate	0.0500	0.0307		mg/Kg		61	40 - 153
Vinyl chloride	0.0500	0.0470		mg/Kg		94	70 - 125
Xylenes, Total	0.100	0.0843		mg/Kg		84	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	85		75 - 131
Dibromofluoromethane	97		75 - 126
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
Toluene-d8 (Surr)	92		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-514018/8
Matrix: Solid
Analysis Batch: 514018

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0353		mg/Kg		71	40 - 150	14	30
Benzene	0.0500	0.0484		mg/Kg		97	70 - 125	0	30
Bromodichloromethane	0.0500	0.0452		mg/Kg		90	67 - 129	2	30
Bromoform	0.0500	0.0470		mg/Kg		94	68 - 136	2	30
Bromomethane	0.0500	0.0508		mg/Kg		102	70 - 130	3	30
2-Butanone (MEK)	0.0500	0.0353		mg/Kg		71	47 - 138	0	30
Carbon disulfide	0.0500	0.0539		mg/Kg		108	70 - 129	1	30
Carbon tetrachloride	0.0500	0.0479		mg/Kg		96	75 - 125	1	30
Chlorobenzene	0.0500	0.0456		mg/Kg		91	50 - 150	0	30
Chloroethane	0.0500	0.0638	*	mg/Kg		128	75 - 125	3	30
Chloroform	0.0500	0.0473		mg/Kg		95	57 - 135	2	30
Chloromethane	0.0500	0.0428		mg/Kg		86	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0494		mg/Kg		99	70 - 125	0	30
cis-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125	0	30
Dibromochloromethane	0.0500	0.0447		mg/Kg		89	69 - 125	2	30
1,1-Dichloroethane	0.0500	0.0500		mg/Kg		100	70 - 125	2	30
1,2-Dichloroethane	0.0500	0.0466		mg/Kg		93	70 - 130	0	30
1,1-Dichloroethene	0.0500	0.0497		mg/Kg		99	70 - 120	1	30
1,2-Dichloropropane	0.0500	0.0484		mg/Kg		97	70 - 125	0	30
Ethylbenzene	0.0500	0.0454		mg/Kg		91	61 - 136	1	30
2-Hexanone	0.0500	0.0382		mg/Kg		76	48 - 146	5	30
Methylene Chloride	0.0500	0.0483		mg/Kg		97	70 - 126	3	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0369		mg/Kg		74	50 - 148	3	30
Methyl tert-butyl ether	0.0500	0.0480		mg/Kg		96	50 - 140	1	30
Styrene	0.0500	0.0437		mg/Kg		87	70 - 125	1	30
1,1,1,2-Tetrachloroethane	0.0500	0.0456		mg/Kg		91	70 - 122	1	30
Tetrachloroethene	0.0500	0.0492		mg/Kg		98	70 - 124	0	30
Toluene	0.0500	0.0452		mg/Kg		90	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0502		mg/Kg		100	70 - 125	0	30
trans-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125	1	30
1,1,1-Trichloroethane	0.0500	0.0479		mg/Kg		96	70 - 128	1	30
1,1,2-Trichloroethane	0.0500	0.0464		mg/Kg		93	70 - 125	3	30
Trichloroethene	0.0500	0.0493		mg/Kg		99	70 - 125	1	30
Vinyl acetate	0.0500	0.0294		mg/Kg		59	40 - 153	4	30
Vinyl chloride	0.0500	0.0470		mg/Kg		94	70 - 125	0	30
Xylenes, Total	0.100	0.0849		mg/Kg		85	53 - 147	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	85		75 - 131
Dibromofluoromethane	97		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	92		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-514279/1-A
Matrix: Solid
Analysis Batch: 514425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514279

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/08/19 07:53	11/08/19 22:16	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-514279/1-A
Matrix: Solid
Analysis Batch: 514425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/08/19 07:53	11/08/19 22:16	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/08/19 07:53	11/08/19 22:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		31 - 166	11/08/19 07:53	11/08/19 22:16	1
Phenol-d5	76		30 - 153	11/08/19 07:53	11/08/19 22:16	1
Nitrobenzene-d5	79		37 - 147	11/08/19 07:53	11/08/19 22:16	1
2-Fluorobiphenyl	90		43 - 145	11/08/19 07:53	11/08/19 22:16	1
2,4,6-Tribromophenol	72		31 - 143	11/08/19 07:53	11/08/19 22:16	1
Terphenyl-d14	95		42 - 157	11/08/19 07:53	11/08/19 22:16	1

Lab Sample ID: LCS 500-514279/2-A
Matrix: Solid
Analysis Batch: 514425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.15		mg/Kg		86	56 - 122
Bis(2-chloroethyl)ether	1.33	1.06		mg/Kg		79	55 - 111
1,3-Dichlorobenzene	1.33	1.18		mg/Kg		89	65 - 124
1,4-Dichlorobenzene	1.33	1.19		mg/Kg		90	61 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		89	62 - 110
2-Methylphenol	1.33	1.08		mg/Kg		81	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.827		mg/Kg		62	40 - 124
N-Nitrosodi-n-propylamine	1.33	0.952		mg/Kg		71	56 - 118
Hexachloroethane	1.33	1.11		mg/Kg		83	60 - 114
2-Chlorophenol	1.33	1.20		mg/Kg		90	64 - 110
Nitrobenzene	1.33	1.17		mg/Kg		88	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.15		mg/Kg		86	60 - 112
1,2,4-Trichlorobenzene	1.33	1.33		mg/Kg		100	66 - 117
Isophorone	1.33	1.08		mg/Kg		81	55 - 110
2,4-Dimethylphenol	1.33	1.11		mg/Kg		83	60 - 110
Hexachlorobutadiene	1.33	1.29		mg/Kg		97	56 - 120
Naphthalene	1.33	1.29		mg/Kg		97	63 - 110
2,4-Dichlorophenol	1.33	1.31		mg/Kg		98	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514279/2-A

Matrix: Solid

Analysis Batch: 514425

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 514279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.23		mg/Kg		92	30 - 150
2,4,6-Trichlorophenol	1.33	1.26		mg/Kg		94	57 - 120
2,4,5-Trichlorophenol	1.33	1.14		mg/Kg		85	50 - 120
Hexachlorocyclopentadiene	1.33	1.05		mg/Kg		78	10 - 133
2-Methylnaphthalene	1.33	1.44		mg/Kg		108	69 - 112
2-Nitroaniline	1.33	1.23		mg/Kg		92	57 - 124
2-Chloronaphthalene	1.33	1.40		mg/Kg		105	69 - 114
4-Chloro-3-methylphenol	1.33	1.17		mg/Kg		88	65 - 122
2,6-Dinitrotoluene	1.33	1.38		mg/Kg		103	70 - 123
2-Nitrophenol	1.33	1.27		mg/Kg		95	60 - 120
3-Nitroaniline	1.33	1.38		mg/Kg		103	40 - 122
Dimethyl phthalate	1.33	1.34		mg/Kg		101	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		15	10 - 100
Acenaphthylene	1.33	1.44		mg/Kg		108	68 - 120
2,4-Dinitrotoluene	1.33	1.30		mg/Kg		98	69 - 124
Acenaphthene	1.33	1.41		mg/Kg		106	65 - 124
Dibenzofuran	1.33	1.37		mg/Kg		103	66 - 115
4-Nitrophenol	2.67	1.61		mg/Kg		60	30 - 122
Fluorene	1.33	1.43		mg/Kg		107	62 - 120
4-Nitroaniline	1.33	1.15		mg/Kg		86	60 - 160
4-Bromophenyl phenyl ether	1.33	1.36		mg/Kg		102	68 - 118
Hexachlorobenzene	1.33	1.50		mg/Kg		112	63 - 124
Diethyl phthalate	1.33	1.26		mg/Kg		94	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.40		mg/Kg		105	62 - 119
Pentachlorophenol	2.67	1.36		mg/Kg		51	13 - 112
N-Nitrosodiphenylamine	1.33	1.42		mg/Kg		107	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.906		mg/Kg		34	10 - 110
Phenanthrene	1.33	1.35		mg/Kg		101	62 - 120
Anthracene	1.33	1.41		mg/Kg		106	70 - 114
Carbazole	1.33	1.47		mg/Kg		110	65 - 142
Di-n-butyl phthalate	1.33	1.32		mg/Kg		99	65 - 120
Fluoranthene	1.33	1.38		mg/Kg		104	62 - 120
Pyrene	1.33	1.38		mg/Kg		103	61 - 128
Butyl benzyl phthalate	1.33	1.33		mg/Kg		99	71 - 129
Benzo[a]anthracene	1.33	1.32		mg/Kg		99	67 - 122
Chrysene	1.33	1.37		mg/Kg		103	63 - 120
3,3'-Dichlorobenzidine	1.33	1.17		mg/Kg		88	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.27		mg/Kg		95	72 - 131
Di-n-octyl phthalate	1.33	1.31		mg/Kg		98	68 - 134
Benzo[b]fluoranthene	1.33	1.49		mg/Kg		112	69 - 129
Benzo[k]fluoranthene	1.33	1.55		mg/Kg		116	68 - 127
Benzo[a]pyrene	1.33	1.47		mg/Kg		110	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.51		mg/Kg		113	68 - 130
Dibenz(a,h)anthracene	1.33	1.45		mg/Kg		109	64 - 131
Benzo[g,h,i]perylene	1.33	1.49		mg/Kg		112	72 - 131
3 & 4 Methylphenol	1.33	1.02		mg/Kg		76	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514279/2-A
Matrix: Solid
Analysis Batch: 514425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514279

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	89		31 - 166
Phenol-d5	81		30 - 153
Nitrobenzene-d5	85		37 - 147
2-Fluorobiphenyl	99		43 - 145
2,4,6-Tribromophenol	112		31 - 143
Terphenyl-d14	95		42 - 157

Lab Sample ID: 500-172620-1 MS
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615VZ-01-B11 (0-6)
Prep Type: Total/NA
Prep Batch: 514279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.19		1.52	1.05		mg/Kg	☼	69	56 - 122
Bis(2-chloroethyl)ether	<0.19		1.52	1.04		mg/Kg	☼	68	55 - 111
1,3-Dichlorobenzene	<0.19		1.52	1.03		mg/Kg	☼	68	60 - 110
1,4-Dichlorobenzene	<0.19		1.52	1.03		mg/Kg	☼	68	61 - 110
1,2-Dichlorobenzene	<0.19		1.52	1.05		mg/Kg	☼	69	62 - 110
2-Methylphenol	<0.19		1.52	1.20		mg/Kg	☼	79	60 - 120
2,2'-oxybis[1-chloropropane]	<0.19		1.52	0.753		mg/Kg	☼	49	40 - 124
N-Nitrosodi-n-propylamine	<0.077		1.52	0.880		mg/Kg	☼	58	56 - 118
Hexachloroethane	<0.19	F1	1.52	0.542	F1	mg/Kg	☼	36	60 - 114
2-Chlorophenol	<0.19		1.52	1.07		mg/Kg	☼	70	64 - 110
Nitrobenzene	<0.038		1.52	1.06		mg/Kg	☼	70	60 - 116
Bis(2-chloroethoxy)methane	<0.19		1.52	1.02		mg/Kg	☼	67	60 - 112
1,2,4-Trichlorobenzene	<0.19		1.52	1.13		mg/Kg	☼	74	66 - 117
Isophorone	<0.19		1.52	0.950		mg/Kg	☼	62	55 - 110
2,4-Dimethylphenol	<0.38		1.52	1.01		mg/Kg	☼	66	60 - 110
Hexachlorobutadiene	<0.19		1.52	1.00		mg/Kg	☼	66	56 - 120
Naphthalene	<0.038		1.52	1.15		mg/Kg	☼	76	63 - 110
2,4-Dichlorophenol	<0.38		1.52	1.12		mg/Kg	☼	74	58 - 120
4-Chloroaniline	<0.77		1.52	0.859		mg/Kg	☼	56	30 - 150
2,4,6-Trichlorophenol	<0.38		1.52	0.976		mg/Kg	☼	64	57 - 120
2,4,5-Trichlorophenol	<0.38		1.52	0.919		mg/Kg	☼	60	50 - 120
Hexachlorocyclopentadiene	<0.77	F1	1.52	<0.76	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.048	J F1	1.52	1.63		mg/Kg	☼	104	69 - 112
2-Nitroaniline	<0.19		1.52	1.02		mg/Kg	☼	67	57 - 124
2-Chloronaphthalene	<0.19		1.52	1.18		mg/Kg	☼	78	69 - 114
4-Chloro-3-methylphenol	<0.38		1.52	0.988		mg/Kg	☼	65	65 - 122
2,6-Dinitrotoluene	<0.19		1.52	1.14		mg/Kg	☼	75	70 - 123
2-Nitrophenol	<0.38		1.52	1.07		mg/Kg	☼	71	60 - 120
3-Nitroaniline	<0.38		1.52	1.07		mg/Kg	☼	70	40 - 122
Dimethyl phthalate	<0.19		1.52	1.15		mg/Kg	☼	75	69 - 116
2,4-Dinitrophenol	<0.77	F1	3.04	<0.76	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.038		1.52	1.17		mg/Kg	☼	77	68 - 120
2,4-Dinitrotoluene	<0.19		1.52	1.05		mg/Kg	☼	69	69 - 124
Acenaphthene	<0.038		1.52	1.17		mg/Kg	☼	77	65 - 124
Dibenzofuran	<0.19		1.52	1.16		mg/Kg	☼	76	66 - 115
4-Nitrophenol	<0.77		3.04	1.25		mg/Kg	☼	41	30 - 122

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-172620-1 MS
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615VZ-01-B11 (0-6)
Prep Type: Total/NA
Prep Batch: 514279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	<0.038		1.52	1.17		mg/Kg	☼	77	62 - 120
4-Nitroaniline	<0.38		1.52	0.979		mg/Kg	☼	64	60 - 160
4-Bromophenyl phenyl ether	<0.19		1.52	1.09		mg/Kg	☼	72	68 - 118
Hexachlorobenzene	<0.077		1.52	1.19		mg/Kg	☼	78	63 - 124
Diethyl phthalate	<0.19		1.52	0.998		mg/Kg	☼	66	58 - 120
4-Chlorophenyl phenyl ether	<0.19		1.52	1.08		mg/Kg	☼	71	62 - 119
Pentachlorophenol	<0.77		3.04	0.793		mg/Kg	☼	26	13 - 112
N-Nitrosodiphenylamine	<0.19		1.52	1.28		mg/Kg	☼	84	65 - 112
4,6-Dinitro-2-methylphenol	<0.77	F1	3.04	<0.76	F1	mg/Kg	☼	0	10 - 110
Phenanthrene	0.14		1.52	1.29		mg/Kg	☼	76	62 - 120
Anthracene	0.012	J	1.52	1.17		mg/Kg	☼	76	70 - 114
Carbazole	<0.19		1.52	1.31		mg/Kg	☼	86	65 - 142
Di-n-butyl phthalate	<0.19		1.52	1.15		mg/Kg	☼	75	65 - 120
Fluoranthene	0.044		1.52	1.20		mg/Kg	☼	76	62 - 120
Pyrene	0.041		1.52	1.48		mg/Kg	☼	95	61 - 128
Butyl benzyl phthalate	<0.19		1.52	1.41		mg/Kg	☼	93	71 - 129
Benzo[a]anthracene	0.023	J	1.52	1.20		mg/Kg	☼	77	67 - 122
Chrysene	<0.038		1.52	1.20		mg/Kg	☼	79	63 - 120
3,3'-Dichlorobenzidine	<0.19		1.52	0.708		mg/Kg	☼	47	35 - 128
Bis(2-ethylhexyl) phthalate	<0.19		1.52	1.37		mg/Kg	☼	90	72 - 131
Di-n-octyl phthalate	<0.19		1.52	1.07		mg/Kg	☼	70	68 - 134
Benzo[b]fluoranthene	0.041		1.52	1.51		mg/Kg	☼	96	69 - 129
Benzo[k]fluoranthene	<0.038		1.52	1.59		mg/Kg	☼	105	68 - 127
Benzo[a]pyrene	0.020	J	1.52	1.23		mg/Kg	☼	80	65 - 133
Indeno[1,2,3-cd]pyrene	<0.038	F1	1.52	0.788	F1	mg/Kg	☼	52	68 - 130
Dibenz(a,h)anthracene	<0.038	F1	1.52	0.785	F1	mg/Kg	☼	52	64 - 131
Benzo[g,h,i]perylene	0.016	J F1	1.52	0.697	F1	mg/Kg	☼	45	72 - 131
3 & 4 Methylphenol	<0.19		1.52	0.954		mg/Kg	☼	63	57 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	70		31 - 166
Phenol-d5	68		30 - 153
Nitrobenzene-d5	59		37 - 147
2-Fluorobiphenyl	67		43 - 145
2,4,6-Tribromophenol	66		31 - 143
Terphenyl-d14	81		42 - 157

Lab Sample ID: 500-172620-1 MSD
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615VZ-01-B11 (0-6)
Prep Type: Total/NA
Prep Batch: 514279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenol	<0.19		1.53	1.19		mg/Kg	☼	78	56 - 122	13	30
Bis(2-chloroethyl)ether	<0.19		1.53	1.32		mg/Kg	☼	87	55 - 111	24	30
1,3-Dichlorobenzene	<0.19		1.53	1.15		mg/Kg	☼	75	60 - 110	11	30
1,4-Dichlorobenzene	<0.19		1.53	1.17		mg/Kg	☼	76	61 - 110	12	30
1,2-Dichlorobenzene	<0.19		1.53	1.21		mg/Kg	☼	80	62 - 110	15	30
2-Methylphenol	<0.19		1.53	1.27		mg/Kg	☼	83	60 - 120	6	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-172620-1 MSD

Matrix: Solid

Analysis Batch: 514979

Client Sample ID: 2615VZ-01-B11 (0-6)

Prep Type: Total/NA

Prep Batch: 514279

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.19		1.53	0.856		mg/Kg	☼	56	40 - 124	13	30
N-Nitrosodi-n-propylamine	<0.077		1.53	1.04		mg/Kg	☼	68	56 - 118	17	30
Hexachloroethane	<0.19	F1	1.53	0.625	F1	mg/Kg	☼	41	60 - 114	14	30
2-Chlorophenol	<0.19		1.53	1.27		mg/Kg	☼	83	64 - 110	17	30
Nitrobenzene	<0.038		1.53	1.16		mg/Kg	☼	76	60 - 116	8	30
Bis(2-chloroethoxy)methane	<0.19		1.53	1.15		mg/Kg	☼	75	60 - 112	12	30
1,2,4-Trichlorobenzene	<0.19		1.53	1.22		mg/Kg	☼	80	66 - 117	8	30
Isophorone	<0.19		1.53	1.09		mg/Kg	☼	72	55 - 110	14	30
2,4-Dimethylphenol	<0.38		1.53	1.22		mg/Kg	☼	80	60 - 110	19	30
Hexachlorobutadiene	<0.19		1.53	1.15		mg/Kg	☼	75	56 - 120	14	30
Naphthalene	<0.038		1.53	1.31		mg/Kg	☼	86	63 - 110	13	30
2,4-Dichlorophenol	<0.38		1.53	1.36		mg/Kg	☼	89	58 - 120	19	30
4-Chloroaniline	<0.77		1.53	1.12		mg/Kg	☼	73	30 - 150	26	30
2,4,6-Trichlorophenol	<0.38		1.53	1.23		mg/Kg	☼	80	57 - 120	23	30
2,4,5-Trichlorophenol	<0.38		1.53	1.23		mg/Kg	☼	80	50 - 120	29	30
Hexachlorocyclopentadiene	<0.77	F1	1.53	<0.77	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.048	J F1	1.53	1.86	F1	mg/Kg	☼	119	69 - 112	13	30
2-Nitroaniline	<0.19		1.53	1.18		mg/Kg	☼	77	57 - 124	14	30
2-Chloronaphthalene	<0.19		1.53	1.32		mg/Kg	☼	86	69 - 114	11	30
4-Chloro-3-methylphenol	<0.38		1.53	1.26		mg/Kg	☼	83	65 - 122	24	30
2,6-Dinitrotoluene	<0.19		1.53	1.41		mg/Kg	☼	92	70 - 123	21	30
2-Nitrophenol	<0.38		1.53	1.26		mg/Kg	☼	83	60 - 120	16	30
3-Nitroaniline	<0.38		1.53	1.21		mg/Kg	☼	79	40 - 122	12	30
Dimethyl phthalate	<0.19		1.53	1.32		mg/Kg	☼	87	69 - 116	14	30
2,4-Dinitrophenol	<0.77	F1	3.05	<0.77	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.038		1.53	1.38		mg/Kg	☼	90	68 - 120	16	30
2,4-Dinitrotoluene	<0.19		1.53	1.25		mg/Kg	☼	82	69 - 124	17	30
Acenaphthene	<0.038		1.53	1.39		mg/Kg	☼	91	65 - 124	18	30
Dibenzofuran	<0.19		1.53	1.38		mg/Kg	☼	90	66 - 115	17	30
4-Nitrophenol	<0.77		3.05	1.22		mg/Kg	☼	40	30 - 122	3	30
Fluorene	<0.038		1.53	1.37		mg/Kg	☼	90	62 - 120	16	30
4-Nitroaniline	<0.38		1.53	1.22		mg/Kg	☼	80	60 - 160	22	30
4-Bromophenyl phenyl ether	<0.19		1.53	1.35		mg/Kg	☼	88	68 - 118	21	30
Hexachlorobenzene	<0.077		1.53	1.51		mg/Kg	☼	99	63 - 124	24	30
Diethyl phthalate	<0.19		1.53	1.20		mg/Kg	☼	79	58 - 120	18	30
4-Chlorophenyl phenyl ether	<0.19		1.53	1.26		mg/Kg	☼	83	62 - 119	15	30
Pentachlorophenol	<0.77		3.05	1.02		mg/Kg	☼	34	13 - 112	25	30
N-Nitrosodiphenylamine	<0.19		1.53	1.57		mg/Kg	☼	103	65 - 112	20	30
4,6-Dinitro-2-methylphenol	<0.77	F1	3.05	<0.77	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.14		1.53	1.66		mg/Kg	☼	100	62 - 120	25	30
Anthracene	0.012	J	1.53	1.47		mg/Kg	☼	95	70 - 114	22	30
Carbazole	<0.19		1.53	1.56		mg/Kg	☼	102	65 - 142	18	30
Di-n-butyl phthalate	<0.19		1.53	1.43		mg/Kg	☼	93	65 - 120	22	30
Fluoranthene	0.044		1.53	1.46		mg/Kg	☼	93	62 - 120	20	30
Pyrene	0.041		1.53	1.75		mg/Kg	☼	112	61 - 128	17	30
Butyl benzyl phthalate	<0.19		1.53	1.67		mg/Kg	☼	109	71 - 129	17	30
Benzo[a]anthracene	0.023	J	1.53	1.41		mg/Kg	☼	91	67 - 122	16	30
Chrysene	<0.038		1.53	1.42		mg/Kg	☼	93	63 - 120	17	30
3,3'-Dichlorobenzidine	<0.19		1.53	0.887		mg/Kg	☼	58	35 - 128	22	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-172620-1 MSD

Matrix: Solid

Analysis Batch: 514979

Client Sample ID: 2615VZ-01-B11 (0-6)

Prep Type: Total/NA

Prep Batch: 514279

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bis(2-ethylhexyl) phthalate	<0.19		1.53	1.62		mg/Kg	☼	106	72 - 131	16	30
Di-n-octyl phthalate	<0.19		1.53	1.34		mg/Kg	☼	88	68 - 134	22	30
Benzo[b]fluoranthene	0.041		1.53	1.89		mg/Kg	☼	121	69 - 129	23	30
Benzo[k]fluoranthene	<0.038		1.53	1.81		mg/Kg	☼	118	68 - 127	13	30
Benzo[a]pyrene	0.020	J	1.53	1.61		mg/Kg	☼	104	65 - 133	27	30
Indeno[1,2,3-cd]pyrene	<0.038	F1	1.53	1.00	F1	mg/Kg	☼	66	68 - 130	24	30
Dibenz(a,h)anthracene	<0.038	F1	1.53	1.01		mg/Kg	☼	66	64 - 131	25	30
Benzo[g,h,i]perylene	0.016	J F1	1.53	0.884	F1	mg/Kg	☼	57	72 - 131	24	30
3 & 4 Methylphenol	<0.19		1.53	1.23		mg/Kg	☼	81	57 - 120	26	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	81		31 - 166
Phenol-d5	82		30 - 153
Nitrobenzene-d5	72		37 - 147
2-Fluorobiphenyl	79		43 - 145
2,4,6-Tribromophenol	77		31 - 143
Terphenyl-d14	101		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-513280/2-A

Matrix: Solid

Analysis Batch: 513587

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 513280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Manganese	0.500	0.499		mg/L		100	80 - 120	

Lab Sample ID: LCS 500-513281/2-A

Matrix: Solid

Analysis Batch: 513530

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 513281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Barium	0.500	0.466	J	mg/L		93	80 - 120	
Beryllium	0.0500	0.0473		mg/L		95	80 - 120	
Boron	1.00	0.941		mg/L		94	80 - 120	
Cadmium	0.0500	0.0467		mg/L		93	80 - 120	
Chromium	0.200	0.195		mg/L		98	80 - 120	
Cobalt	0.500	0.466		mg/L		93	80 - 120	
Iron	1.00	1.02		mg/L		102	80 - 120	
Lead	0.100	0.0954		mg/L		95	80 - 120	
Manganese	0.500	0.502		mg/L		100	80 - 120	
Nickel	0.500	0.470		mg/L		94	80 - 120	
Selenium	0.100	0.0952		mg/L		95	80 - 120	
Silver	0.0500	0.0451		mg/L		90	80 - 120	
Zinc	0.500	0.466	J	mg/L		93	80 - 120	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-514424/1-A
Matrix: Solid
Analysis Batch: 514791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Arsenic	<1.0		1.0	0.34	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Barium	<1.0		1.0	0.11	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Beryllium	<0.40		0.40	0.093	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Boron	<5.0		5.0	0.47	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Cadmium	0.0578	J	0.20	0.036	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Calcium	<20		20	3.4	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Chromium	0.681	J	1.0	0.50	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Cobalt	<0.50		0.50	0.13	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Copper	<1.0		1.0	0.28	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Iron	16.9	J	20	10	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Lead	<0.50		0.50	0.23	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Magnesium	<10		10	5.0	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Manganese	<1.0		1.0	0.15	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Nickel	<1.0		1.0	0.29	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Potassium	<50		50	18	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Silver	<0.50		0.50	0.13	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Sodium	<100		100	15	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Thallium	<1.0		1.0	0.50	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Vanadium	<0.50		0.50	0.12	mg/Kg		11/08/19 17:37	11/11/19 14:11	1
Zinc	<2.0		2.0	0.88	mg/Kg		11/08/19 17:37	11/11/19 14:11	1

Lab Sample ID: LCS 500-514424/2-A
Matrix: Solid
Analysis Batch: 514791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514424

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.2		mg/Kg		96	80 - 120
Arsenic	10.0	9.36		mg/Kg		94	80 - 120
Barium	200	196		mg/Kg		98	80 - 120
Beryllium	5.00	4.78		mg/Kg		96	80 - 120
Boron	100	83.8		mg/Kg		84	80 - 120
Cadmium	5.00	4.61		mg/Kg		92	80 - 120
Calcium	1000	901		mg/Kg		90	80 - 120
Chromium	20.0	19.2		mg/Kg		96	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	25.0	24.2		mg/Kg		97	80 - 120
Iron	100	109		mg/Kg		109	80 - 120
Lead	10.0	8.90		mg/Kg		89	80 - 120
Magnesium	1000	915		mg/Kg		91	80 - 120
Manganese	50.0	48.2		mg/Kg		96	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Potassium	1000	948		mg/Kg		95	80 - 120
Selenium	10.0	8.59		mg/Kg		86	80 - 120
Silver	5.00	4.45		mg/Kg		89	80 - 120
Sodium	1000	977		mg/Kg		98	80 - 120
Thallium	10.0	8.53		mg/Kg		85	80 - 120
Vanadium	50.0	47.9		mg/Kg		96	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-514424/2-A
Matrix: Solid
Analysis Batch: 514791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514424
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Zinc	50.0	47.0		mg/Kg		94	80 - 120

Lab Sample ID: LB 500-513114/1-B
Matrix: Solid
Analysis Batch: 513530

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 513281

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/03/19 17:04	11/04/19 19:01	1
Boron	<0.50		0.50	0.050	mg/L		11/03/19 17:04	11/04/19 19:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/03/19 17:04	11/04/19 19:01	1
Chromium	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:01	1
Cobalt	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:01	1
Iron	<0.40		0.40	0.20	mg/L		11/03/19 17:04	11/04/19 19:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/03/19 17:04	11/04/19 19:01	1
Manganese	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:01	1
Nickel	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:01	1
Selenium	<0.050		0.050	0.020	mg/L		11/03/19 17:04	11/04/19 19:01	1
Silver	<0.025		0.025	0.010	mg/L		11/03/19 17:04	11/04/19 19:01	1
Zinc	0.0515	J	0.50	0.020	mg/L		11/03/19 17:04	11/04/19 19:01	1

Lab Sample ID: 500-172620-9 MS
Matrix: Solid
Analysis Batch: 513530

Client Sample ID: 2615VZ-01-B34 (0-6)D
Prep Type: TCLP
Prep Batch: 513281
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.61		0.500	0.992		mg/L		76	75 - 125
Beryllium	<0.0040		0.0500	0.0428		mg/L		86	75 - 125
Boron	0.081	J	1.00	0.985		mg/L		90	75 - 125
Cadmium	<0.0050		0.0500	0.0422		mg/L		84	75 - 125
Chromium	<0.025		0.200	0.179		mg/L		89	75 - 125
Cobalt	0.011	J	0.500	0.418		mg/L		81	75 - 125
Iron	<0.40		1.00	0.996		mg/L		100	75 - 125
Lead	<0.0075		0.100	0.0898		mg/L		90	75 - 125
Manganese	2.1		0.500	2.45	4	mg/L		72	75 - 125
Nickel	0.031		0.500	0.442		mg/L		82	75 - 125
Selenium	<0.050		0.100	0.0981		mg/L		98	75 - 125
Silver	<0.025		0.0500	0.0459		mg/L		92	75 - 125
Zinc	0.043	J B	0.500	0.487	J	mg/L		89	75 - 125

Lab Sample ID: 500-172620-9 DU
Matrix: Solid
Analysis Batch: 513530

Client Sample ID: 2615VZ-01-B34 (0-6)D
Prep Type: TCLP
Prep Batch: 513281

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	0.61		0.585		mg/L		5	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.081	J	0.0759	J	mg/L		6	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-172620-9 DU
Matrix: Solid
Analysis Batch: 513530

Client Sample ID: 2615VZ-01-B34 (0-6)D
Prep Type: TCLP
Prep Batch: 513281

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.011	J	0.0108	J	mg/L		6	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	2.1		1.98		mg/L		5	20
Nickel	0.031		0.0298		mg/L		5	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.043	J B	0.0442	J	mg/L		2	20

Lab Sample ID: LB 500-513113/1-B
Matrix: Solid
Analysis Batch: 513587

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 513280

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		11/03/19 17:02	11/05/19 03:37	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-513281/2-A
Matrix: Solid
Analysis Batch: 513472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513281

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.564		mg/L		113	80 - 120
Thallium	0.100	0.116		mg/L		116	80 - 120

Lab Sample ID: LB 500-513114/1-B
Matrix: Solid
Analysis Batch: 513472

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 513281

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		11/03/19 17:04	11/04/19 13:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/03/19 17:04	11/04/19 13:06	1

Lab Sample ID: 500-172620-9 MS
Matrix: Solid
Analysis Batch: 513472

Client Sample ID: 2615VZ-01-B34 (0-6)D
Prep Type: TCLP
Prep Batch: 513281

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Antimony	<0.0060		0.500	0.529		mg/L		106	75 - 125
Thallium	<0.0020		0.100	0.102		mg/L		102	75 - 125

Lab Sample ID: 500-172620-9 DU
Matrix: Solid
Analysis Batch: 513472

Client Sample ID: 2615VZ-01-B34 (0-6)D
Prep Type: TCLP
Prep Batch: 513281

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-513620/12-A
Matrix: Solid
Analysis Batch: 513885

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 513620

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:10	1

Lab Sample ID: LCS 500-513620/13-A
Matrix: Solid
Analysis Batch: 513885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513620
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00198		mg/L		99	80 - 120

Lab Sample ID: LB 500-513114/1-C
Matrix: Solid
Analysis Batch: 513885

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 513620

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/19 10:35	11/06/19 09:14	1

Lab Sample ID: 500-172620-6 MS
Matrix: Solid
Analysis Batch: 513885

Client Sample ID: 2615VZ-01-B32 (0-6)
Prep Type: TCLP
Prep Batch: 513620
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00101		mg/L		101	75 - 125

Lab Sample ID: 500-172620-6 DU
Matrix: Solid
Analysis Batch: 513885

Client Sample ID: 2615VZ-01-B32 (0-6)
Prep Type: TCLP
Prep Batch: 513620
RPD

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-513628/12-A
Matrix: Solid
Analysis Batch: 513874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 513628

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/05/19 14:30	11/06/19 08:01	1

Lab Sample ID: LCS 500-513628/13-A
Matrix: Solid
Analysis Batch: 513874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513628
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.162		mg/Kg		97	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-172620-5 MS
Matrix: Solid
Analysis Batch: 513874

Client Sample ID: 2615VZ-01-B26 (0-7)
Prep Type: Total/NA
Prep Batch: 513628

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.014	J	0.0925	0.0957		mg/Kg	☼	88	75 - 125

Lab Sample ID: 500-172620-5 MSD
Matrix: Solid
Analysis Batch: 513874

Client Sample ID: 2615VZ-01-B26 (0-7)
Prep Type: Total/NA
Prep Batch: 513628

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.014	J	0.0923	0.0991		mg/Kg	☼	92	75 - 125	3	20

Lab Sample ID: 500-172620-5 DU
Matrix: Solid
Analysis Batch: 513874

Client Sample ID: 2615VZ-01-B26 (0-7)
Prep Type: Total/NA
Prep Batch: 513628

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.014	J	0.0150	J	mg/Kg	☼	4	20

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B11 (0-6)

Lab Sample ID: 500-172620-1

Date Collected: 10/30/19 12:35

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 03:45	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:10	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:14	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:16	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
					(Start)	11/01/19 15:03		
					(End)	11/01/19 15:09		
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B11 (0-6)

Lab Sample ID: 500-172620-1

Date Collected: 10/30/19 12:35

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 15:04	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/11/19 23:38	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 14:43	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:19	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:11	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 03:49	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:14	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:18	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:21	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
					(Start)	11/01/19 15:09		
					(End)	11/01/19 15:14		
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B12 (0-7)

Lab Sample ID: 500-172620-2

Date Collected: 10/30/19 12:40

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 15:30	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/12/19 00:05	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 14:47	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:23	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:14	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:01	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:18	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:21	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:23	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B13 (0-7)

Lab Sample ID: 500-172620-3

Date Collected: 10/30/19 12:45

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 15:55	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/12/19 00:32	NRJ	TAL CHI
Total/NA	Prep	3541	DL		514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D	DL	10	515067	11/13/19 13:32	AJD	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 14:59	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:27	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:16	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Date Collected: 10/30/19 12:55

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:05	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:22	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:25	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:25	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
					(Start)	11/01/19 15:20		
					(End)	11/01/19 15:26		
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B25 (0-7)

Lab Sample ID: 500-172620-4

Date Collected: 10/30/19 12:55

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 16:21	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/12/19 00:59	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 15:03	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:32	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:18	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:09	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:27	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:29	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077	(Start) 11/01/19 15:26 (End) 11/01/19 15:32	TMS	TAL CHI
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 16:46	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/12/19 01:26	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 15:07	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B26 (0-7)

Lab Sample ID: 500-172620-5

Date Collected: 10/30/19 13:50

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:36	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:24	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B32 (0-6)

Lab Sample ID: 500-172620-6

Date Collected: 10/30/19 14:12

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:13	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:31	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:33	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
					(Start)	11/01/19 15:32		
					(End)	11/01/19 15:38		
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B32 (0-6)

Lab Sample ID: 500-172620-6

Date Collected: 10/30/19 14:12

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 17:11	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/12/19 01:53	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 15:11	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:40	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:33	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Date Collected: 10/30/19 14:42

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:17	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:35	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:36	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:32	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
					(Start)	11/01/19 15:38		
					(End)	11/01/19 15:44		
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B33 (0-6)

Lab Sample ID: 500-172620-7

Date Collected: 10/30/19 14:42

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 17:36	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514681	11/12/19 02:20	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 15:15	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 12:44	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:35	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:21	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:39	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:48	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:34	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
					(Start)	11/01/19 15:44		
					(End)	11/01/19 15:49		
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B34 (0-6)

Lab Sample ID: 500-172620-8

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 18:01	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514295	11/08/19 19:43	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 15:19	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 13:01	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:37	MJG	TAL CHI

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513113	11/01/19 11:35	GCA	TAL CHI
SPLP East	Prep	3010A			513280	11/03/19 17:02	BDE	TAL CHI
SPLP East	Analysis	6010B		1	513587	11/05/19 04:26	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6010B		1	513530	11/04/19 19:52	EEN	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	3010A			513281	11/03/19 17:04	BDE	TAL CHI
TCLP	Analysis	6020A		1	513472	11/04/19 13:51	FXG	TAL CHI
TCLP	Leach	1311			513114	11/01/19 11:35	GCA	TAL CHI
TCLP	Prep	7470A			513620	11/05/19 10:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	513885	11/06/19 09:36	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	513077		TMS	TAL CHI
Total/NA	Analysis	Moisture		1	513042	11/01/19 11:13	LWN	TAL CHI

Client Sample ID: 2615VZ-01-B34 (0-6)D

Lab Sample ID: 500-172620-9

Date Collected: 10/30/19 15:10

Matrix: Solid

Date Received: 10/30/19 17:00

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			513307	10/31/19 17:03	WRE	TAL CHI
Total/NA	Analysis	8260B		1	514018	11/07/19 18:27	PMF	TAL CHI
Total/NA	Prep	3541			514279	11/08/19 07:53	DX	TAL CHI
Total/NA	Analysis	8270D		1	514295	11/08/19 20:08	NRJ	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		1	514791	11/11/19 15:23	JEF	TAL CHI
Total/NA	Prep	3050B			514424	11/08/19 17:37	BDE	TAL CHI
Total/NA	Analysis	6010B		10	514944	11/12/19 13:05	JEF	TAL CHI
Total/NA	Prep	7471B			513628	11/05/19 14:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	513874	11/06/19 08:39	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172620-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
500-172620 COC
PO#/Reference# _____



Chain of Custody Record

Lab Job #: 500-172620
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 5.0

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
E+E		100950100934.0447.01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
176-001-W047E										VOC SVOC Total/TCMP Metals pH Percent Solids	
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
Chicago, IL		R. Wright									
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
AH, JH		R. Wright									
Lab ID	MS/MSD	Sample ID		Date		Time		# of Containers		Matrix	
1		2615V2-01-B11(O-6)		10/30/19		1235		5 5		X X X X X	
2		2615V2-01-B12(O-7)		10/30/19		1240		5 5		X X X X X	
3		2615V2-01-B13(O-7)		10/30/19		1245		5 5		X X X X X	
4		2615V2-01-B25(O-7)		10/30/19		1255		5 5		X X X X X	
5		2615V2-01-B26(O-7)		10/30/19		1350		5 5		X X X X X	
6		2615V2-01-B32(O-6)		10/30/19		1412		5 5		X X X X X	
7		2615V2-01-B33(O-6)		10/30/19		1442		5 5		X X X X X	
8		2615V2-01-B34(O-6)		10/30/19		1510		5 5		X X X X X	
9		2615V2-01-B34(O-6)D		10/30/19		1510		5 5		X X X X X	

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Requested Due Date _____

Sample Disposal

Return to Client

Disposal by Lab

Archive for _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>J. Hughes</i>	Company E+E	Date 10/30/19	Time 1640	Received By <i>J. Hughes</i>	Company E+E	Date 10/30/19	Time 1640
Relinquished By <i>J. Hughes</i>	Company TA	Date 10/30/19	Time 1710	Received By <i>J. Hughes</i>	Company TA	Date 10/30/19	Time 1710
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
Shipped: _____
Hand Delivered: _____

Matrix Key

WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-172620-1

Login Number: 172620

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-172777-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
11/18/2019 9:23:47 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Job ID: 500-172777-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-172777-1

Receipt

The samples were received on 11/1/2019 5:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.3° C and 5.4° C.

GC/MS VOA

Method 8260B: The laboratory control sample and laboratory control sample duplicate (LCS/ LCSD) for 514618 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS/ LCSD and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 514806 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-514806/2-A)

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-172777-E-1-G MS) and (500-172777-E-1-H MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The method blank for preparation batch 500-514992 and analytical batch 500-515394 contained calcium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The continuing calibration blank (CCB) for 500-515394 contained magnesium above the reporting limit (RL). Associated sample 2615V2-01-B20 (0-4) (500-172777-10) and 2615V2-01-B64 (0-6) (500-172777-17) was not re-analyzed because results were greater than 10X the value found in the CCB.

Method 6010B: The method blank for preparation batch 500-514992 and analytical batch 500-515395 contained Zinc above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.017	J	0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.017	J F1	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.033	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.064		0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.068		0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.84	F1 F2	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.21		0.037	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.6	F1 F2	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	1.5	F1 F2	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.87	F1 F2	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.70	F1 F2	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.092	J	0.19	0.069	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.72	F1 F2	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.84	F1 F2	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.85	F1 F2	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.34	F1	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.045		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.35	F1	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.51	J F1	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.7	F1	0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.41	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	120000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	13	B F1 F2	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.6		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	31	F1 F2	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B F2	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	140	F2	0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	66000	B F2	53	26	mg/Kg	10	☼	6010B	Total/NA
Manganese	320	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1800	F1 F2	27	9.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J F1	0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.34	J	0.53	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	88	F1 F2	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.26	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.080		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.034	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B02 (0-5) (Continued)

Lab Sample ID: 500-172777-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.032	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.59	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6	B	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.94		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.070		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.056		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.066	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.021	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.49	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.3		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	60000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B03 (0-4) (Continued)

Lab Sample ID: 500-172777-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	25000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.51	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7	B	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	910		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.94		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.63		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.034	J	0.082	0.0074	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.010	J	0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.018	J	0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.034	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.043		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.48	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.7		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	15		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.099	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.60	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	40		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	330		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B08 (0-7) (Continued)

Lab Sample ID: 500-172777-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.019		0.018	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.043	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.025	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.42	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	13		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	70000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	13	B	0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	30000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	420	B	0.58	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	360		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.69		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	44		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.68		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.033	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.021	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.018	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1



Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	0.089		0.075	0.0069	mg/Kg	1	*		8270D	Total/NA
Phenanthrene	0.18		0.037	0.0052	mg/Kg	1	*		8270D	Total/NA
Anthracene	0.0076	J	0.037	0.0062	mg/Kg	1	*		8270D	Total/NA
Fluoranthene	0.032	J	0.037	0.0069	mg/Kg	1	*		8270D	Total/NA
Pyrene	0.046		0.037	0.0074	mg/Kg	1	*		8270D	Total/NA
Benzo[a]anthracene	0.015	J	0.037	0.0050	mg/Kg	1	*		8270D	Total/NA
Chrysene	0.051		0.037	0.010	mg/Kg	1	*		8270D	Total/NA
Benzo[a]pyrene	0.016	J	0.037	0.0072	mg/Kg	1	*		8270D	Total/NA
Benzo[g,h,i]perylene	0.028	J	0.037	0.012	mg/Kg	1	*		8270D	Total/NA
Antimony	0.39	J	1.1	0.22	mg/Kg	1	*		6010B	Total/NA
Arsenic	8.5		0.57	0.20	mg/Kg	1	*		6010B	Total/NA
Barium	42		0.57	0.065	mg/Kg	1	*		6010B	Total/NA
Beryllium	0.60		0.23	0.053	mg/Kg	1	*		6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	*		6010B	Total/NA
Cadmium	0.14	B	0.11	0.021	mg/Kg	1	*		6010B	Total/NA
Calcium	57000	B	110	19	mg/Kg	10	*		6010B	Total/NA
Chromium	16	B	0.57	0.28	mg/Kg	1	*		6010B	Total/NA
Cobalt	16		0.29	0.075	mg/Kg	1	*		6010B	Total/NA
Copper	39		0.57	0.16	mg/Kg	1	*		6010B	Total/NA
Iron	21000	B	11	5.9	mg/Kg	1	*		6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	*		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (0-5) (Continued)

Lab Sample ID: 500-172777-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	24000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	370	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	40		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.70		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5	B	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.056		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.051	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
N-Nitrosodiphenylamine	0.060	J	0.21	0.048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.074		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.011	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.019	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.7		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7	B	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	860		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.82		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (5-9) (Continued)

Lab Sample ID: 500-172777-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.040		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.020	0.0066	mg/Kg	1	*	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.026	J	0.029	0.012	mg/Kg	1	*	8260B	Total/NA
Naphthalene	0.021	J	0.037	0.0057	mg/Kg	1	*	8270D	Total/NA
2-Methylnaphthalene	0.0091	J	0.075	0.0068	mg/Kg	1	*	8270D	Total/NA
Acenaphthylene	0.0061	J	0.037	0.0049	mg/Kg	1	*	8270D	Total/NA
Acenaphthene	0.011	J	0.037	0.0067	mg/Kg	1	*	8270D	Total/NA
Fluorene	0.010	J	0.037	0.0052	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.15		0.037	0.0052	mg/Kg	1	*	8270D	Total/NA
Anthracene	0.038		0.037	0.0062	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.24		0.037	0.0069	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.30		0.037	0.0074	mg/Kg	1	*	8270D	Total/NA
Benzo[a]anthracene	0.13		0.037	0.0050	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.16		0.037	0.010	mg/Kg	1	*	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.22		0.19	0.068	mg/Kg	1	*	8270D	Total/NA
Benzo[b]fluoranthene	0.20		0.037	0.0080	mg/Kg	1	*	8270D	Total/NA
Benzo[k]fluoranthene	0.073		0.037	0.011	mg/Kg	1	*	8270D	Total/NA
Benzo[a]pyrene	0.15		0.037	0.0072	mg/Kg	1	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.069		0.037	0.0096	mg/Kg	1	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.090		0.037	0.012	mg/Kg	1	*	8270D	Total/NA
Antimony	0.36	J	1.1	0.21	mg/Kg	1	*	6010B	Total/NA
Arsenic	1.1		0.54	0.18	mg/Kg	1	*	6010B	Total/NA
Barium	8.0		0.54	0.061	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.16	J	0.21	0.050	mg/Kg	1	*	6010B	Total/NA
Boron	11		2.7	0.25	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.30	B	0.11	0.019	mg/Kg	1	*	6010B	Total/NA
Calcium	140000	B	110	18	mg/Kg	10	*	6010B	Total/NA
Chromium	5.4	B	0.54	0.27	mg/Kg	1	*	6010B	Total/NA
Cobalt	1.7		0.27	0.070	mg/Kg	1	*	6010B	Total/NA
Copper	12		0.54	0.15	mg/Kg	1	*	6010B	Total/NA
Iron	2900	B	11	5.6	mg/Kg	1	*	6010B	Total/NA
Lead	51		0.27	0.12	mg/Kg	1	*	6010B	Total/NA
Magnesium	84000	B	54	27	mg/Kg	10	*	6010B	Total/NA
Manganese	120	B	0.54	0.078	mg/Kg	1	*	6010B	Total/NA
Nickel	5.8		0.54	0.16	mg/Kg	1	*	6010B	Total/NA
Potassium	670		27	9.5	mg/Kg	1	*	6010B	Total/NA
Selenium	0.39	J	0.54	0.32	mg/Kg	1	*	6010B	Total/NA
Silver	0.67	B	0.27	0.069	mg/Kg	1	*	6010B	Total/NA
Sodium	680		54	7.9	mg/Kg	1	*	6010B	Total/NA
Vanadium	7.0		0.27	0.063	mg/Kg	1	*	6010B	Total/NA
Zinc	33		1.1	0.47	mg/Kg	1	*	6010B	Total/NA
Barium	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B19 (0-7) (Continued)

Lab Sample ID: 500-172777-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.027		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.87		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.019		0.018	0.0059	mg/Kg	1	*	7471B	Total/NA
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

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- 14

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.098		0.038	0.0059	mg/Kg	1	*		8270D	Total/NA
2-Methylnaphthalene	0.46		0.077	0.0071	mg/Kg	1	*		8270D	Total/NA
Fluorene	0.013	J	0.038	0.0054	mg/Kg	1	*		8270D	Total/NA
Phenanthrene	0.19		0.038	0.0054	mg/Kg	1	*		8270D	Total/NA
Pyrene	0.019	J	0.038	0.0076	mg/Kg	1	*		8270D	Total/NA
Benzo[a]anthracene	0.031	J	0.038	0.0052	mg/Kg	1	*		8270D	Total/NA
Benzo[g,h,i]perylene	0.022	J	0.038	0.012	mg/Kg	1	*		8270D	Total/NA
Antimony	0.58	J	1.1	0.22	mg/Kg	1	*		6010B	Total/NA
Arsenic	8.0		0.56	0.19	mg/Kg	1	*		6010B	Total/NA
Barium	49		0.56	0.064	mg/Kg	1	*		6010B	Total/NA
Beryllium	0.65		0.22	0.052	mg/Kg	1	*		6010B	Total/NA
Boron	14		2.8	0.26	mg/Kg	1	*		6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1	*		6010B	Total/NA
Calcium	60000	B	110	19	mg/Kg	10	*		6010B	Total/NA
Chromium	16	B	0.56	0.28	mg/Kg	1	*		6010B	Total/NA
Cobalt	14		0.28	0.073	mg/Kg	1	*		6010B	Total/NA
Copper	27		0.56	0.16	mg/Kg	1	*		6010B	Total/NA
Iron	21000	B	11	5.8	mg/Kg	1	*		6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	*		6010B	Total/NA
Magnesium	24000	B	5.6	2.8	mg/Kg	1	*		6010B	Total/NA
Manganese	350	B	0.56	0.081	mg/Kg	1	*		6010B	Total/NA
Nickel	37		0.56	0.16	mg/Kg	1	*		6010B	Total/NA
Potassium	3100		28	9.9	mg/Kg	1	*		6010B	Total/NA
Selenium	0.36	J	0.56	0.33	mg/Kg	1	*		6010B	Total/NA
Silver	2.5	B	0.28	0.072	mg/Kg	1	*		6010B	Total/NA
Sodium	1000		56	8.3	mg/Kg	1	*		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B21 (0-4) (Continued)

Lab Sample ID: 500-172777-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.88		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.045		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.072		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B52 (0-6)

Lab Sample ID: 500-172777-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenzofuran	0.045	J	0.19	0.043	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.20		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.018	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.042		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.33	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.0		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	12		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	65000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	12	B	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	39		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	20		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	29000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	520	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2300		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.61		0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	340		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.46	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.020	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.015	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.029	J	0.075	0.0068	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.021	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.7		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	11		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	62000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	12	B	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	380	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	460		54	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.70		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.20	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.015	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0095	J	0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.014	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.079		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.017	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.026	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.56	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.1		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	15		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	64000	B	120	21	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B59 (0-7) (Continued)

Lab Sample ID: 500-172777-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	16	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	350	B	0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	32		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	630		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.54	J	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.36	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.044		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.037	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.026		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0086	J	0.019	0.0083	mg/Kg	1	☼	8260B	Total/NA
Antimony	0.36	J	1.1	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	0.41	J	0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	1.0		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.052	J	0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	7.9		2.6	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.092	J B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	210000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	0.91	B	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	0.63	J	1.3	0.34	mg/Kg	5	☼	6010B	Total/NA
Iron	1500	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	1.6		1.3	0.61	mg/Kg	5	☼	6010B	Total/NA
Magnesium	130000	B ^	26	13	mg/Kg	5	☼	6010B	Total/NA
Manganese	94	B	0.53	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	4.0		2.6	0.76	mg/Kg	5	☼	6010B	Total/NA
Potassium	230		26	9.3	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J B	0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	240		53	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	0.66		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Boron	0.087	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	1.6		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.30		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B64 (0-6) (Continued)

Lab Sample ID: 500-172777-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-172777-1	2615V2-01-B01 (0-5)	Solid	11/01/19 10:05	11/01/19 17:40	
500-172777-2	2615V2-01-B02 (0-5)	Solid	11/01/19 10:15	11/01/19 17:40	
500-172777-3	2615V2-01-B03 (0-4)	Solid	11/01/19 10:30	11/01/19 17:40	
500-172777-4	2615V2-01-B08 (0-7)	Solid	11/01/19 11:00	11/01/19 17:40	
500-172777-5	2615V2-01-B09 (0-7)	Solid	11/01/19 11:25	11/01/19 17:40	
500-172777-7	2615V2-01-B14 (0-5)	Solid	11/01/19 12:35	11/01/19 17:40	
500-172777-8	2615V2-01-B14 (5-9)	Solid	11/01/19 12:42	11/01/19 17:40	
500-172777-9	2615V2-01-B19 (0-7)	Solid	11/01/19 13:04	11/01/19 17:40	
500-172777-13	2615V2-01-B21 (0-4)	Solid	11/01/19 13:58	11/01/19 17:40	
500-172777-14	2615V2-01-B52 (0-6)	Solid	11/01/19 14:20	11/01/19 17:40	
500-172777-15	2615V2-01-B58 (0-7)	Solid	11/01/19 14:30	11/01/19 17:40	
500-172777-16	2615V2-01-B59 (0-7)	Solid	11/01/19 14:55	11/01/19 17:40	
500-172777-17	2615V2-01-B64 (0-6)	Solid	11/01/19 15:18	11/01/19 17:40	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Date Collected: 11/01/19 10:05

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.022		0.022	0.0095	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Benzene	<0.0022		0.0022	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Bromoform	<0.0022		0.0022	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
2-Butanone (MEK)	<0.0055		0.0055	0.0024	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Carbon disulfide	<0.0055		0.0055	0.0011	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Chlorobenzene	<0.0022		0.0022	0.00081	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Chloroform	<0.0022		0.0022	0.00076	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Dibromochloromethane	<0.0022		0.0022	0.00072	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,1-Dichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00077	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00070	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00097	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00077	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00094	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Trichloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Vinyl acetate	<0.0055		0.0055	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Vinyl chloride	<0.0022		0.0022	0.00097	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1
Xylenes, Total	<0.0044		0.0044	0.00070	mg/Kg	☼	11/02/19 13:02	11/08/19 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131	11/02/19 13:02	11/08/19 19:30	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 19:30	1
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	11/02/19 13:02	11/08/19 19:30	1
Toluene-d8 (Surr)	92		75 - 124	11/02/19 13:02	11/08/19 19:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Date Collected: 11/01/19 10:05

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Hexachloroethane	<0.19	F1	0.19	0.057	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Naphthalene	0.017	J	0.037	0.0058	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Hexachlorocyclopentadiene	<0.76	F1	0.76	0.22	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2-Methylnaphthalene	0.017	J F1	0.076	0.0069	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,4-Dinitrophenol	<0.76	F1 *	0.76	0.66	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Acenaphthylene	0.033	J	0.037	0.0049	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Acenaphthene	0.064		0.037	0.0067	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4-Nitrophenol	<0.76	F1 F2	0.76	0.36	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Fluorene	0.068		0.037	0.0053	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Phenanthrene	0.84	F1 F2	0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Anthracene	0.21		0.037	0.0063	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Fluoranthene	1.6	F1 F2	0.037	0.0070	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Pyrene	1.5	F1 F2	0.037	0.0075	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Benzo[a]anthracene	0.87	F1 F2	0.037	0.0051	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Date Collected: 11/01/19 10:05

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.70	F1 F2	0.037	0.010	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
3,3'-Dichlorobenzidine	<0.19	F1 F2	0.19	0.053	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Bis(2-ethylhexyl) phthalate	0.092	J	0.19	0.069	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Benzo[b]fluoranthene	0.72	F1 F2	0.037	0.0081	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Benzo[k]fluoranthene	0.84	F1 F2	0.037	0.011	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Benzo[a]pyrene	0.85	F1 F2	0.037	0.0073	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Indeno[1,2,3-cd]pyrene	0.34	F1	0.037	0.0097	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Dibenz(a,h)anthracene	0.045		0.037	0.0073	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Benzo[g,h,i]perylene	0.35	F1	0.037	0.012	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/12/19 22:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		31 - 166				11/12/19 07:31	11/12/19 22:27	1
Phenol-d5	77		30 - 153				11/12/19 07:31	11/12/19 22:27	1
Nitrobenzene-d5	71		37 - 147				11/12/19 07:31	11/12/19 22:27	1
2-Fluorobiphenyl	80		43 - 145				11/12/19 07:31	11/12/19 22:27	1
2,4,6-Tribromophenol	74		31 - 143				11/12/19 07:31	11/12/19 22:27	1
Terphenyl-d14	91		42 - 157				11/12/19 07:31	11/12/19 22:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J F1	1.1	0.21	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Arsenic	5.7	F1	0.53	0.18	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Barium	53		0.53	0.061	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Beryllium	0.46		0.21	0.050	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Boron	14		2.7	0.25	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Cadmium	0.41	B	0.11	0.019	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Calcium	120000	B	110	18	mg/Kg	☼	11/12/19 17:57	11/14/19 10:56	10
Chromium	13	B F1 F2	0.53	0.26	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Cobalt	9.6		0.27	0.070	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Copper	31	F1 F2	0.53	0.15	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Iron	13000	B F2	11	5.5	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Lead	140	F2	0.27	0.12	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Magnesium	66000	B F2	53	26	mg/Kg	☼	11/12/19 17:57	11/14/19 10:56	10
Manganese	320	B	0.53	0.077	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Nickel	21		0.53	0.15	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Potassium	1800	F1 F2	27	9.4	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Selenium	0.41	J F1	0.53	0.31	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Silver	1.8	B	0.27	0.069	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Sodium	640		53	7.9	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Thallium	0.34	J	0.53	0.27	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Vanadium	14		0.27	0.063	mg/Kg	☼	11/12/19 17:57	11/13/19 23:17	1
Zinc	88	F1 F2	1.1	0.47	mg/Kg	☼	11/12/19 17:57	11/14/19 10:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.26	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:13	1
Boron	0.12	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Date Collected: 11/01/19 10:05

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:13	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:13	1
Cobalt	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:13	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:13	1
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:13	1
Nickel	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:13	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:13	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:13	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080		0.018	0.0060	mg/Kg	☼	11/07/19 14:15	11/08/19 07:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			11/06/19 14:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 12:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 131	11/02/19 13:02	11/08/19 12:41	1
Dibromofluoromethane	83		75 - 126	11/02/19 13:02	11/08/19 12:41	1
1,2-Dichloroethane-d4 (Surr)	80		70 - 134	11/02/19 13:02	11/08/19 12:41	1
Toluene-d8 (Surr)	93		75 - 124	11/02/19 13:02	11/08/19 12:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2-Methylnaphthalene	0.034	J	0.079	0.0072	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Phenanthrene	0.11		0.039	0.0055	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Fluoranthene	0.020	J	0.039	0.0073	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Pyrene	0.032	J	0.039	0.0078	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
Benzo[g,h,i]perylene	0.016	J	0.039	0.013	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/12/19 07:31	11/12/19 22:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		31 - 166	11/12/19 07:31	11/12/19 22:54	1
Phenol-d5	81		30 - 153	11/12/19 07:31	11/12/19 22:54	1
Nitrobenzene-d5	76		37 - 147	11/12/19 07:31	11/12/19 22:54	1
2-Fluorobiphenyl	82		43 - 145	11/12/19 07:31	11/12/19 22:54	1
2,4,6-Tribromophenol	77		31 - 143	11/12/19 07:31	11/12/19 22:54	1
Terphenyl-d14	97		42 - 157	11/12/19 07:31	11/12/19 22:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.1	0.22	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Arsenic	8.1		0.57	0.20	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Barium	41		0.57	0.065	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Beryllium	0.62		0.23	0.054	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Boron	14		2.9	0.27	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Cadmium	0.10	J B	0.11	0.021	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Calcium	58000	B	110	19	mg/Kg	☼	11/12/19 17:57	11/14/19 11:47	10
Chromium	16	B	0.57	0.28	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Cobalt	15		0.29	0.075	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Copper	33		0.57	0.16	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Iron	20000	B	11	6.0	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Lead	15		0.29	0.13	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Magnesium	25000	B	5.7	2.8	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Manganese	360	B	0.57	0.083	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Nickel	39		0.57	0.17	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Potassium	3000		29	10	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Selenium	0.59		0.57	0.34	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Silver	2.6	B	0.29	0.074	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Sodium	370		57	8.5	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Thallium	1.1		0.57	0.29	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Vanadium	18		0.29	0.068	mg/Kg	☼	11/12/19 17:57	11/13/19 23:38	1
Zinc	50		1.1	0.50	mg/Kg	☼	11/12/19 17:57	11/14/19 11:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.35	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:18	1
Boron	0.12	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:18	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:18	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:18	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:18	1
Manganese	0.94		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:18	1
Nickel	0.070		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:18	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:18	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:18	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.056		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 14:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:23	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0065	mg/Kg	☼	11/07/19 14:15	11/08/19 07:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/06/19 15:00	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Chloromethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 13:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 131	11/02/19 13:02	11/08/19 13:06	1
Dibromofluoromethane	83		75 - 126	11/02/19 13:02	11/08/19 13:06	1
1,2-Dichloroethane-d4 (Surr)	80		70 - 134	11/02/19 13:02	11/08/19 13:06	1
Toluene-d8 (Surr)	93		75 - 124	11/02/19 13:02	11/08/19 13:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 82.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2-Methylnaphthalene	0.066	J	0.081	0.0074	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Phenanthrene	0.11		0.040	0.0056	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Pyrene	0.021	J	0.040	0.0080	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 82.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/12/19 07:31	11/12/19 23:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		31 - 166	11/12/19 07:31	11/12/19 23:21	1
Phenol-d5	83		30 - 153	11/12/19 07:31	11/12/19 23:21	1
Nitrobenzene-d5	77		37 - 147	11/12/19 07:31	11/12/19 23:21	1
2-Fluorobiphenyl	87		43 - 145	11/12/19 07:31	11/12/19 23:21	1
2,4,6-Tribromophenol	74		31 - 143	11/12/19 07:31	11/12/19 23:21	1
Terphenyl-d14	94		42 - 157	11/12/19 07:31	11/12/19 23:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.2	0.22	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Arsenic	8.3		0.58	0.20	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Barium	45		0.58	0.066	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Beryllium	0.63		0.23	0.054	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Boron	14		2.9	0.27	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Cadmium	0.15	B	0.12	0.021	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Calcium	60000	B	120	20	mg/Kg	☼	11/12/19 17:57	11/14/19 12:03	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Cobalt	13		0.29	0.075	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Copper	26		0.58	0.16	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Iron	21000	B	12	6.0	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Lead	14		0.29	0.13	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Magnesium	25000	B	5.8	2.9	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Manganese	330	B	0.58	0.084	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Nickel	35		0.58	0.17	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Potassium	3000		29	10	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Selenium	0.51	J	0.58	0.34	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Silver	2.7	B	0.29	0.074	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Sodium	910		58	8.5	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Thallium	0.89		0.58	0.29	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Vanadium	18		0.29	0.068	mg/Kg	☼	11/12/19 17:57	11/13/19 23:42	1
Zinc	52		1.2	0.51	mg/Kg	☼	11/12/19 17:57	11/14/19 11:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:22	1
Boron	0.082	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 82.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:22	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:22	1
Cobalt	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:22	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:22	1
Manganese	0.94		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:22	1
Nickel	0.036		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:22	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:22	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:22	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:22	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.63		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:00	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0060	mg/Kg	☼	11/07/19 14:15	11/08/19 07:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/06/19 15:02	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Date Collected: 11/01/19 11:00

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131	11/02/19 13:02	11/08/19 13:32	1
Dibromofluoromethane	83		75 - 126	11/02/19 13:02	11/08/19 13:32	1
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	11/02/19 13:02	11/08/19 13:32	1
Toluene-d8 (Surr)	94		75 - 124	11/02/19 13:02	11/08/19 13:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Date Collected: 11/01/19 11:00

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2-Methylnaphthalene	0.034	J	0.082	0.0074	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,4-Dinitrophenol	<0.82	*	0.82	0.71	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Fluorene	0.010	J	0.040	0.0057	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Phenanthrene	0.13		0.040	0.0056	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Fluoranthene	0.018	J	0.040	0.0075	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Pyrene	0.034	J	0.040	0.0080	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Date Collected: 11/01/19 11:00

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.043		0.040	0.011	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/12/19 07:31	11/12/19 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		31 - 166				11/12/19 07:31	11/12/19 23:48	1
Phenol-d5	77		30 - 153				11/12/19 07:31	11/12/19 23:48	1
Nitrobenzene-d5	75		37 - 147				11/12/19 07:31	11/12/19 23:48	1
2-Fluorobiphenyl	86		43 - 145				11/12/19 07:31	11/12/19 23:48	1
2,4,6-Tribromophenol	84		31 - 143				11/12/19 07:31	11/12/19 23:48	1
Terphenyl-d14	103		42 - 157				11/12/19 07:31	11/12/19 23:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.2	0.24	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Arsenic	6.7		0.60	0.21	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Barium	43		0.60	0.069	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Beryllium	0.65		0.24	0.056	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Boron	15		3.0	0.28	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Cadmium	0.099	J B	0.12	0.022	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Calcium	57000	B	120	20	mg/Kg	☼	11/12/19 17:57	11/14/19 12:12	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Cobalt	15		0.30	0.079	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Copper	29		0.60	0.17	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Iron	21000	B	12	6.3	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Lead	16		0.30	0.14	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Magnesium	24000	B	6.0	3.0	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Manganese	360	B	0.60	0.088	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Nickel	40		0.60	0.18	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Potassium	3200		30	11	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Selenium	<0.60		0.60	0.36	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Silver	2.5	B	0.30	0.078	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Sodium	330		60	8.9	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Thallium	1.0		0.60	0.30	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Vanadium	18		0.30	0.071	mg/Kg	☼	11/12/19 17:57	11/13/19 23:46	1
Zinc	48		1.2	0.53	mg/Kg	☼	11/12/19 17:57	11/14/19 12:08	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.36	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:35	1
Boron	0.12	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Date Collected: 11/01/19 11:00

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:35	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:35	1
Cobalt	0.011	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:35	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:35	1
Manganese	1.4		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:35	1
Nickel	0.036		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:35	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:35	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:35	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:35	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:04	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0065	mg/Kg	☼	11/07/19 14:15	11/08/19 07:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/06/19 15:04	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 84.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.019		0.018	0.0076	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 131	11/02/19 13:02	11/08/19 13:57	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 13:57	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134	11/02/19 13:02	11/08/19 13:57	1
Toluene-d8 (Surr)	92		75 - 124	11/02/19 13:02	11/08/19 13:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,4,5-Trichlorophenol	<0.39		0.39	0.088	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2-Methylnaphthalene	0.043	J	0.078	0.0071	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Phenanthrene	0.12		0.039	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Pyrene	0.022	J	0.039	0.0077	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Benzof[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.025	J	0.039	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Benzo[g,h,i]perylene	<0.039		0.039	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 00:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	92		31 - 166				11/12/19 07:31	11/13/19 00:15	1
Phenol-d5	84		30 - 153				11/12/19 07:31	11/13/19 00:15	1
Nitrobenzene-d5	74		37 - 147				11/12/19 07:31	11/13/19 00:15	1
2-Fluorobiphenyl	85		43 - 145				11/12/19 07:31	11/13/19 00:15	1
2,4,6-Tribromophenol	71		31 - 143				11/12/19 07:31	11/13/19 00:15	1
Terphenyl-d14	97		42 - 157				11/12/19 07:31	11/13/19 00:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	1.2	0.22	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Arsenic	7.5		0.58	0.20	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Barium	34		0.58	0.066	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Beryllium	0.59		0.23	0.054	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Boron	13		2.9	0.27	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Calcium	70000	B	120	20	mg/Kg	☼	11/12/19 17:57	11/14/19 12:20	10
Chromium	13	B	0.58	0.28	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Cobalt	13		0.29	0.075	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Copper	28		0.58	0.16	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Iron	18000	B	12	6.0	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Lead	14		0.29	0.13	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Magnesium	30000	B	5.8	2.9	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Manganese	420	B	0.58	0.083	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Nickel	33		0.58	0.17	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Potassium	2600		29	10	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Selenium	0.45	J	0.58	0.34	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Silver	2.2	B	0.29	0.074	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Sodium	360		58	8.5	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Thallium	0.69		0.58	0.29	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Vanadium	15		0.29	0.068	mg/Kg	☼	11/12/19 17:57	11/13/19 23:50	1
Zinc	44		1.2	0.51	mg/Kg	☼	11/12/19 17:57	11/14/19 12:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:39	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 84.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:39	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:39	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:39	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:39	1
Manganese	1.8		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:39	1
Nickel	0.046		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:39	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:39	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:39	1
Zinc	0.033	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:39	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.021	J	0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:09	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0058	mg/Kg	☼	11/07/19 14:15	11/08/19 07:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/06/19 15:07	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 92.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	11/02/19 13:02	11/08/19 14:23	1
Dibromofluoromethane	83		75 - 126	11/02/19 13:02	11/08/19 14:23	1
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	11/02/19 13:02	11/08/19 14:23	1
Toluene-d8 (Surr)	90		75 - 124	11/02/19 13:02	11/08/19 14:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.078	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 92.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4-Chloroaniline	<0.71		0.71	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,4-Dinitrophenol	<0.71 *		0.71	0.62	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Phenanthrene	0.0089	J	0.035	0.0049	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Fluoranthene	0.010	J	0.035	0.0065	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Pyrene	0.0099	J	0.035	0.0070	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Benzof[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 92.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.035		0.035	0.0096	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Benzo[a]pyrene	<0.035		0.035	0.0068	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0091	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 00:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		31 - 166	11/12/19 07:31	11/13/19 00:42	1
Phenol-d5	72		30 - 153	11/12/19 07:31	11/13/19 00:42	1
Nitrobenzene-d5	69		37 - 147	11/12/19 07:31	11/13/19 00:42	1
2-Fluorobiphenyl	81		43 - 145	11/12/19 07:31	11/13/19 00:42	1
2,4,6-Tribromophenol	59		31 - 143	11/12/19 07:31	11/13/19 00:42	1
Terphenyl-d14	90		42 - 157	11/12/19 07:31	11/13/19 00:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.0	0.20	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Arsenic	1.1		0.52	0.18	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Barium	6.3		0.52	0.059	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Beryllium	<0.21		0.21	0.049	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Boron	2.3	J	2.6	0.24	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Cadmium	0.12	B	0.10	0.019	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Calcium	42000	B	100	18	mg/Kg	☼	11/12/19 17:57	11/14/19 12:29	10
Chromium	4.8	B	0.52	0.26	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Cobalt	1.6		0.26	0.068	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Copper	3.7		0.52	0.15	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Iron	3300	B	10	5.4	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Lead	2.1		0.26	0.12	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Magnesium	16000	B	5.2	2.6	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Manganese	72	B	0.52	0.076	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Nickel	4.2		0.52	0.15	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Potassium	300		26	9.2	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Silver	0.96	B	0.26	0.067	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Sodium	490		52	7.7	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Vanadium	5.9		0.26	0.061	mg/Kg	☼	11/12/19 17:57	11/14/19 00:02	1
Zinc	12		1.0	0.46	mg/Kg	☼	11/12/19 17:57	11/14/19 12:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.14	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:44	1
Boron	0.11	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 92.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:44	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:44	1
Cobalt	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:44	1
Iron	0.27	J	0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:44	1
Manganese	0.68		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:44	1
Nickel	0.015	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:44	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:44	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:44	1
Zinc	0.047	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:44	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.018		0.018	0.0059	mg/Kg	☼	11/07/19 14:15	11/08/19 07:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.3		0.2	0.2	SU			11/06/19 15:09	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Date Collected: 11/01/19 12:35

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 85.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 131	11/02/19 13:02	11/08/19 14:48	1
Dibromofluoromethane	84		75 - 126	11/02/19 13:02	11/08/19 14:48	1
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	11/02/19 13:02	11/08/19 14:48	1
Toluene-d8 (Surr)	93		75 - 124	11/02/19 13:02	11/08/19 14:48	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Date Collected: 11/01/19 12:35

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 85.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2-Methylnaphthalene	0.089		0.075	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,4-Dinitrophenol	<0.75 *		0.75	0.66	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Phenanthrene	0.18		0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Anthracene	0.0076 J		0.037	0.0062	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Fluoranthene	0.032 J		0.037	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Pyrene	0.046		0.037	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Benzo[a]anthracene	0.015 J		0.037	0.0050	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Date Collected: 11/01/19 12:35

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 85.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.051		0.037	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Benzo[a]pyrene	0.016	J	0.037	0.0072	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Benzo[g,h,i]perylene	0.028	J	0.037	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				11/12/19 07:31	11/13/19 16:27	1
Phenol-d5	78		30 - 153				11/12/19 07:31	11/13/19 16:27	1
Nitrobenzene-d5	77		37 - 147				11/12/19 07:31	11/13/19 16:27	1
2-Fluorobiphenyl	97		43 - 145				11/12/19 07:31	11/13/19 16:27	1
2,4,6-Tribromophenol	93		31 - 143				11/12/19 07:31	11/13/19 16:27	1
Terphenyl-d14	93		42 - 157				11/12/19 07:31	11/13/19 16:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.1	0.22	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Arsenic	8.5		0.57	0.20	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Barium	42		0.57	0.065	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Beryllium	0.60		0.23	0.053	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Boron	14		2.9	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Cadmium	0.14	B	0.11	0.021	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Calcium	57000	B	110	19	mg/Kg	☼	11/12/19 17:57	11/14/19 12:37	10
Chromium	16	B	0.57	0.28	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Cobalt	16		0.29	0.075	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Copper	39		0.57	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Iron	21000	B	11	5.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Lead	17		0.29	0.13	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Magnesium	24000	B	5.7	2.8	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Manganese	370	B	0.57	0.083	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Nickel	40		0.57	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Potassium	3100		29	10	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Selenium	0.70		0.57	0.34	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Silver	2.5	B	0.29	0.074	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Sodium	1400		57	8.5	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Thallium	1.1		0.57	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Vanadium	18		0.29	0.067	mg/Kg	☼	11/12/19 17:57	11/14/19 00:06	1
Zinc	53		1.1	0.50	mg/Kg	☼	11/12/19 17:57	11/14/19 12:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:48	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Date Collected: 11/01/19 12:35

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 85.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:48	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:48	1
Cobalt	0.017	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:48	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:48	1
Manganese	1.9		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:48	1
Nickel	0.056		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:48	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:48	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:48	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:48	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.3		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0060	mg/Kg	☼	11/07/19 14:15	11/08/19 07:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			11/06/19 15:11	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Date Collected: 11/01/19 12:42

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/02/19 13:02	11/08/19 15:14	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 15:14	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134	11/02/19 13:02	11/08/19 15:14	1
Toluene-d8 (Surr)	92		75 - 124	11/02/19 13:02	11/08/19 15:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Date Collected: 11/01/19 12:42

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2-Methylnaphthalene	0.051	J	0.083	0.0076	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
N-Nitrosodiphenylamine	0.060	J	0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Phenanthrene	0.074		0.041	0.0057	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Pyrene	0.011	J	0.041	0.0082	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Date Collected: 11/01/19 12:42

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.019	J	0.041	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/12/19 07:31	11/13/19 16:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		31 - 166				11/12/19 07:31	11/13/19 16:52	1
Phenol-d5	68		30 - 153				11/12/19 07:31	11/13/19 16:52	1
Nitrobenzene-d5	69		37 - 147				11/12/19 07:31	11/13/19 16:52	1
2-Fluorobiphenyl	83		43 - 145				11/12/19 07:31	11/13/19 16:52	1
2,4,6-Tribromophenol	79		31 - 143				11/12/19 07:31	11/13/19 16:52	1
Terphenyl-d14	93		42 - 157				11/12/19 07:31	11/13/19 16:52	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.2	0.23	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Arsenic	7.7		0.59	0.20	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Barium	47		0.59	0.067	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Beryllium	0.69		0.23	0.055	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Boron	16		2.9	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Calcium	57000	B	120	20	mg/Kg	☼	11/12/19 17:57	11/14/19 12:54	10
Chromium	17	B	0.59	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Cobalt	14		0.29	0.077	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Copper	27		0.59	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Iron	21000	B	12	6.1	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Lead	14		0.29	0.14	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Magnesium	24000	B	5.9	2.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Manganese	340	B	0.59	0.085	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Nickel	37		0.59	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Potassium	3200		29	10	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Selenium	0.52	J	0.59	0.34	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Silver	2.7	B	0.29	0.076	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Sodium	860		59	8.7	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Thallium	0.82		0.59	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Vanadium	20		0.29	0.069	mg/Kg	☼	11/12/19 17:57	11/14/19 00:10	1
Zinc	52		1.2	0.51	mg/Kg	☼	11/12/19 17:57	11/14/19 12:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:52	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Date Collected: 11/01/19 12:42

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:52	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:52	1
Cobalt	0.010	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:52	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:52	1
Manganese	1.8		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:52	1
Nickel	0.033		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:52	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:52	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:52	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.040		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:40	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.020	0.0066	mg/Kg	☼	11/07/19 14:15	11/08/19 07:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/06/19 15:13	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.026	J	0.029	0.012	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Benzene	<0.0029		0.0029	0.00073	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Bromodichloromethane	<0.0029		0.0029	0.00058	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Bromoform	<0.0029		0.0029	0.00084	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Bromomethane	<0.0072		0.0072	0.0027	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
2-Butanone (MEK)	<0.0072		0.0072	0.0032	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Carbon disulfide	<0.0072		0.0072	0.0015	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Carbon tetrachloride	<0.0029		0.0029	0.00083	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Chlorobenzene	<0.0029		0.0029	0.0011	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Chloroethane	<0.0072	*	0.0072	0.0021	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Chloroform	<0.0029		0.0029	0.00099	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Chloromethane	<0.0072		0.0072	0.0029	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
cis-1,2-Dichloroethene	<0.0029		0.0029	0.00080	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
cis-1,3-Dichloropropene	<0.0029		0.0029	0.00086	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Dibromochloromethane	<0.0029		0.0029	0.00094	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,1-Dichloroethane	<0.0029		0.0029	0.00098	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,2-Dichloroethane	<0.0072		0.0072	0.0022	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,1-Dichloroethene	<0.0029		0.0029	0.00099	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,2-Dichloropropane	<0.0029		0.0029	0.00074	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,3-Dichloropropane, Total	<0.0029		0.0029	0.0010	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Ethylbenzene	<0.0029		0.0029	0.0014	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
2-Hexanone	<0.0072		0.0072	0.0022	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Methylene Chloride	<0.0072		0.0072	0.0028	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
4-Methyl-2-pentanone (MIBK)	<0.0072		0.0072	0.0021	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Methyl tert-butyl ether	<0.0029		0.0029	0.00084	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Styrene	<0.0029		0.0029	0.00087	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,1,2,2-Tetrachloroethane	<0.0029		0.0029	0.00092	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Tetrachloroethene	<0.0029		0.0029	0.00098	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Toluene	<0.0029		0.0029	0.00072	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
trans-1,2-Dichloroethene	<0.0029		0.0029	0.0013	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
trans-1,3-Dichloropropene	<0.0029		0.0029	0.0010	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,1,1-Trichloroethane	<0.0029		0.0029	0.00096	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
1,1,2-Trichloroethane	<0.0029		0.0029	0.0012	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Trichloroethene	<0.0029		0.0029	0.00097	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Vinyl acetate	<0.0072		0.0072	0.0025	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Vinyl chloride	<0.0029		0.0029	0.0013	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1
Xylenes, Total	<0.0057		0.0057	0.00092	mg/Kg	☼	11/02/19 13:02	11/11/19 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 131	11/02/19 13:02	11/11/19 14:48	1
Dibromofluoromethane	84		75 - 126	11/02/19 13:02	11/11/19 14:48	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/02/19 13:02	11/11/19 14:48	1
Toluene-d8 (Surr)	96		75 - 124	11/02/19 13:02	11/11/19 14:48	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Naphthalene	0.021	J	0.037	0.0057	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2-Methylnaphthalene	0.0091	J	0.075	0.0068	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,4-Dinitrophenol	<0.75	*	0.75	0.65	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Acenaphthylene	0.0061	J	0.037	0.0049	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Acenaphthene	0.011	J	0.037	0.0067	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Fluorene	0.010	J	0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Phenanthrene	0.15		0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Anthracene	0.038		0.037	0.0062	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Fluoranthene	0.24		0.037	0.0069	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Pyrene	0.30		0.037	0.0074	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Benzo[a]anthracene	0.13		0.037	0.0050	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.16		0.037	0.010	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Bis(2-ethylhexyl) phthalate	0.22		0.19	0.068	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Benzo[b]fluoranthene	0.20		0.037	0.0080	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Benzo[k]fluoranthene	0.073		0.037	0.011	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Benzo[a]pyrene	0.15		0.037	0.0072	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Indeno[1,2,3-cd]pyrene	0.069		0.037	0.0096	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Benzo[g,h,i]perylene	0.090		0.037	0.012	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/12/19 07:31	11/14/19 21:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166				11/12/19 07:31	11/14/19 21:17	1
Phenol-d5	71		30 - 153				11/12/19 07:31	11/14/19 21:17	1
Nitrobenzene-d5	73		37 - 147				11/12/19 07:31	11/14/19 21:17	1
2-Fluorobiphenyl	91		43 - 145				11/12/19 07:31	11/14/19 21:17	1
2,4,6-Tribromophenol	36		31 - 143				11/12/19 07:31	11/14/19 21:17	1
Terphenyl-d14	119		42 - 157				11/12/19 07:31	11/14/19 21:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.1	0.21	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Arsenic	1.1		0.54	0.18	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Barium	8.0		0.54	0.061	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Beryllium	0.16	J	0.21	0.050	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Boron	11		2.7	0.25	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Cadmium	0.30	B	0.11	0.019	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Calcium	140000	B	110	18	mg/Kg	☼	11/12/19 17:57	11/14/19 13:02	10
Chromium	5.4	B	0.54	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Cobalt	1.7		0.27	0.070	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Copper	12		0.54	0.15	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Iron	2900	B	11	5.6	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Lead	51		0.27	0.12	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Magnesium	84000	B	54	27	mg/Kg	☼	11/12/19 17:57	11/14/19 13:02	10
Manganese	120	B	0.54	0.078	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Nickel	5.8		0.54	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Potassium	670		27	9.5	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Selenium	0.39	J	0.54	0.32	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Silver	0.67	B	0.27	0.069	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Sodium	680		54	7.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Vanadium	7.0		0.27	0.063	mg/Kg	☼	11/12/19 17:57	11/14/19 00:14	1
Zinc	33		1.1	0.47	mg/Kg	☼	11/12/19 17:57	11/14/19 12:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.16	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:57	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:57	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0025	J	0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:57	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:57	1
Cobalt	0.020	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:57	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:57	1
Lead	0.027		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:57	1
Manganese	0.87		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:57	1
Nickel	0.020	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:57	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:57	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:57	1
Zinc	0.13	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:57	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:53	11/07/19 15:34	1
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0059	mg/Kg	☼	11/07/19 14:15	11/08/19 07:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			11/06/19 15:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.022		0.022	0.0097	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
2-Butanone (MEK)	<0.0055		0.0055	0.0025	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Carbon disulfide	<0.0055		0.0055	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Carbon tetrachloride	<0.0022		0.0022	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Chlorobenzene	<0.0022		0.0022	0.00082	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Dibromochloromethane	<0.0022		0.0022	0.00073	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Tetrachloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00098	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00095	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Vinyl acetate	<0.0055		0.0055	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Vinyl chloride	<0.0022		0.0022	0.00098	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1
Xylenes, Total	<0.0044		0.0044	0.00071	mg/Kg	☼	11/02/19 13:02	11/08/19 16:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	11/02/19 13:02	11/08/19 16:06	1
Dibromofluoromethane	84		75 - 126	11/02/19 13:02	11/08/19 16:06	1
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	11/02/19 13:02	11/08/19 16:06	1
Toluene-d8 (Surr)	90		75 - 124	11/02/19 13:02	11/08/19 16:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.075	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2-Methylphenol	<0.17		0.17	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
N-Nitrosodi-n-propylamine	<0.068		0.068	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Nitrobenzene	<0.034		0.034	0.0084	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,4-Dichlorophenol	<0.34		0.34	0.080	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4-Chloroaniline	<0.68		0.68	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,4,5-Trichlorophenol	<0.34		0.34	0.077	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Hexachlorocyclopentadiene	<0.68		0.68	0.19	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2-Methylnaphthalene	<0.068		0.068	0.0062	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2-Nitrophenol	<0.34		0.34	0.080	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
3-Nitroaniline	<0.34		0.34	0.10	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,4-Dinitrophenol	<0.68	*	0.68	0.60	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4-Nitrophenol	<0.68		0.68	0.32	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Hexachlorobenzene	<0.068		0.068	0.0078	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Diethyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Pentachlorophenol	<0.68		0.68	0.54	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
4,6-Dinitro-2-methylphenol	<0.68		0.68	0.27	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Phenanthrene	0.0049	J	0.034	0.0047	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Fluoranthene	0.0095	J	0.034	0.0063	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Pyrene	0.0091	J	0.034	0.0067	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Butyl benzyl phthalate	<0.17		0.17	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Benzo[a]anthracene	0.0068	J	0.034	0.0046	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.034		0.034	0.0092	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Bis(2-ethylhexyl) phthalate	0.090	J	0.17	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Benzo[b]fluoranthene	0.014	J	0.034	0.0073	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Benzo[a]pyrene	0.0068	J	0.034	0.0065	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0088	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0065	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
3 & 4 Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	46		31 - 166				11/12/19 07:31	11/13/19 13:11	1
Phenol-d5	59		30 - 153				11/12/19 07:31	11/13/19 13:11	1
Nitrobenzene-d5	52		37 - 147				11/12/19 07:31	11/13/19 13:11	1
2-Fluorobiphenyl	68		43 - 145				11/12/19 07:31	11/13/19 13:11	1
2,4,6-Tribromophenol	98		31 - 143				11/12/19 07:31	11/13/19 13:11	1
Terphenyl-d14	90		42 - 157				11/12/19 07:31	11/13/19 13:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	0.99	0.19	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Arsenic	1.6		0.49	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Barium	4.5		0.49	0.056	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Beryllium	0.17	J	0.20	0.046	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Boron	14		2.5	0.23	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Cadmium	0.15	B	0.099	0.018	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Calcium	190000	B	99	17	mg/Kg	☼	11/12/19 17:57	11/14/19 11:05	10
Chromium	3.1	B	0.49	0.24	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Cobalt	2.7		0.25	0.065	mg/Kg	☼	11/12/19 17:57	11/14/19 10:57	1
Copper	2.3		0.49	0.14	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Iron	2700	B	9.9	5.1	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Lead	7.5		0.25	0.11	mg/Kg	☼	11/12/19 17:57	11/14/19 10:57	1
Magnesium	110000	B ^	25	12	mg/Kg	☼	11/12/19 17:57	11/14/19 11:01	5
Manganese	130	B	0.49	0.072	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Nickel	3.4		0.49	0.14	mg/Kg	☼	11/12/19 17:57	11/14/19 10:57	1
Potassium	990		25	8.7	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Selenium	0.29	J	0.49	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Silver	0.76	B	0.25	0.064	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Sodium	310		49	7.3	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Thallium	<0.49		0.49	0.25	mg/Kg	☼	11/12/19 17:57	11/14/19 10:57	1
Vanadium	3.2		0.25	0.058	mg/Kg	☼	11/12/19 17:57	11/14/19 00:18	1
Zinc	7.2		0.99	0.43	mg/Kg	☼	11/12/19 17:57	11/14/19 10:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:01	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:01	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:01	1
Cobalt	0.042		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:01	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:01	1
Manganese	0.34		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:01	1
Nickel	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:01	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:01	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:01	1
Zinc	0.022	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:01	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:39	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:52	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0059	J	0.016	0.0053	mg/Kg	☼	11/07/19 14:15	11/08/19 08:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.3		0.2	0.2	SU			11/06/19 15:20	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)

Lab Sample ID: 500-172777-11

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 16:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 131	11/02/19 13:02	11/08/19 16:31	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 16:31	1
1,2-Dichloroethane-d4 (Surr)	79		70 - 134	11/02/19 13:02	11/08/19 16:31	1
Toluene-d8 (Surr)	93		75 - 124	11/02/19 13:02	11/08/19 16:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)

Lab Sample ID: 500-172777-11

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2-Methylnaphthalene	0.053	J	0.083	0.0076	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Pyrene	0.022	J	0.041	0.0082	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Benzo[a]anthracene	0.024	J	0.041	0.0055	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)

Lab Sample ID: 500-172777-11

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
Benzo[g,h,i]perylene	0.022	J	0.041	0.013	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/12/19 07:31	11/13/19 17:16	1

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166			11/12/19 07:31	11/13/19 17:16	1
Phenol-d5	70		30 - 153			11/12/19 07:31	11/13/19 17:16	1
Nitrobenzene-d5	72		37 - 147			11/12/19 07:31	11/13/19 17:16	1
2-Fluorobiphenyl	89		43 - 145			11/12/19 07:31	11/13/19 17:16	1
2,4,6-Tribromophenol	102		31 - 143			11/12/19 07:31	11/13/19 17:16	1
Terphenyl-d14	98		42 - 157			11/12/19 07:31	11/13/19 17:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.2	0.23	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Arsenic	6.7		0.59	0.20	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Barium	43		0.59	0.068	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Beryllium	0.65		0.24	0.055	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Boron	13		3.0	0.28	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Cadmium	0.12	B	0.12	0.021	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Calcium	57000	B	120	20	mg/Kg	☼	11/12/19 17:57	11/14/19 13:11	10
Chromium	15	B	0.59	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Cobalt	13		0.30	0.078	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Copper	25		0.59	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Iron	19000	B	12	6.2	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Lead	13		0.30	0.14	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Magnesium	23000	B	5.9	2.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Manganese	330	B	0.59	0.086	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Nickel	34		0.59	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Potassium	2800		30	10	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Silver	2.3	B	0.30	0.076	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Sodium	730		59	8.8	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Thallium	0.77		0.59	0.30	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Vanadium	17		0.30	0.070	mg/Kg	☼	11/12/19 17:57	11/14/19 00:22	1
Zinc	50		1.2	0.52	mg/Kg	☼	11/12/19 17:57	11/14/19 13:07	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:06	1
Boron	0.14	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)

Lab Sample ID: 500-172777-11

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:06	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:06	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:06	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:06	1
Manganese	1.9		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:06	1
Nickel	0.037		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:06	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:06	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:06	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:06	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.057		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:43	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:55	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0064	mg/Kg	☼	11/07/19 14:15	11/08/19 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/06/19 15:22	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	11/02/19 13:02	11/08/19 16:57	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 16:57	1
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	11/02/19 13:02	11/08/19 16:57	1
Toluene-d8 (Surr)	93		75 - 124	11/02/19 13:02	11/08/19 16:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2-Methylnaphthalene	0.038	J	0.082	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,4-Dinitrophenol	<0.82	*	0.82	0.71	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Phenanthrene	0.095		0.040	0.0056	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Pyrene	0.012	J	0.040	0.0080	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Benzo[a]anthracene	0.022	J	0.040	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
Benzo[g,h,i]perylene	0.015	J	0.040	0.013	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/12/19 07:31	11/13/19 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166	11/12/19 07:31	11/13/19 17:41	1
Phenol-d5	75		30 - 153	11/12/19 07:31	11/13/19 17:41	1
Nitrobenzene-d5	75		37 - 147	11/12/19 07:31	11/13/19 17:41	1
2-Fluorobiphenyl	92		43 - 145	11/12/19 07:31	11/13/19 17:41	1
2,4,6-Tribromophenol	83		31 - 143	11/12/19 07:31	11/13/19 17:41	1
Terphenyl-d14	93		42 - 157	11/12/19 07:31	11/13/19 17:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.2	0.23	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Arsenic	7.6		0.58	0.20	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Barium	39		0.58	0.066	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Beryllium	0.61		0.23	0.054	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Boron	13		2.9	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Cadmium	0.12	B	0.12	0.021	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Calcium	59000	B	120	20	mg/Kg	☼	11/12/19 17:57	11/14/19 13:19	10
Chromium	15	B	0.58	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Cobalt	15		0.29	0.076	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Copper	28		0.58	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Iron	20000	B	12	6.1	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Lead	15		0.29	0.13	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Magnesium	25000	B	5.8	2.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Manganese	360	B	0.58	0.084	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Nickel	37		0.58	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Potassium	2700		29	10	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Selenium	0.60		0.58	0.34	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Silver	2.4	B	0.29	0.075	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Sodium	460		58	8.6	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Thallium	0.99		0.58	0.29	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Vanadium	17		0.29	0.069	mg/Kg	☼	11/12/19 17:57	11/14/19 00:26	1
Zinc	49		1.2	0.51	mg/Kg	☼	11/12/19 17:57	11/14/19 13:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:10	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:10	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:10	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:10	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:10	1
Manganese	1.8		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:10	1
Nickel	0.036		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:10	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:10	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:10	1
Zinc	0.049	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:10	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:47	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.020	0.0066	mg/Kg	☼	11/07/19 14:15	11/08/19 08:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/06/19 15:25	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/02/19 13:02	11/08/19 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131	11/02/19 13:02	11/08/19 17:23	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 17:23	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 134	11/02/19 13:02	11/08/19 17:23	1
Toluene-d8 (Surr)	93		75 - 124	11/02/19 13:02	11/08/19 17:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Naphthalene	0.098		0.038	0.0059	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2-Methylnaphthalene	0.46		0.077	0.0071	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,4-Dinitrophenol	<0.77 *		0.77	0.68	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Fluorene	0.013 J		0.038	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Phenanthrene	0.19		0.038	0.0054	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Pyrene	0.019 J		0.038	0.0076	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Benzo[a]anthracene	0.031 J		0.038	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
Benzo[g,h,i]perylene	0.022	J	0.038	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166	11/12/19 07:31	11/13/19 18:06	1
Phenol-d5	69		30 - 153	11/12/19 07:31	11/13/19 18:06	1
Nitrobenzene-d5	72		37 - 147	11/12/19 07:31	11/13/19 18:06	1
2-Fluorobiphenyl	89		43 - 145	11/12/19 07:31	11/13/19 18:06	1
2,4,6-Tribromophenol	81		31 - 143	11/12/19 07:31	11/13/19 18:06	1
Terphenyl-d14	89		42 - 157	11/12/19 07:31	11/13/19 18:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.1	0.22	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Arsenic	8.0		0.56	0.19	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Barium	49		0.56	0.064	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Beryllium	0.65		0.22	0.052	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Boron	14		2.8	0.26	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Cadmium	0.14	B	0.11	0.020	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Calcium	60000	B	110	19	mg/Kg	☼	11/12/19 17:57	11/14/19 13:28	10
Chromium	16	B	0.56	0.28	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Cobalt	14		0.28	0.073	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Copper	27		0.56	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Iron	21000	B	11	5.8	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Lead	14		0.28	0.13	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Magnesium	24000	B	5.6	2.8	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Manganese	350	B	0.56	0.081	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Nickel	37		0.56	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Potassium	3100		28	9.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Selenium	0.36	J	0.56	0.33	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Silver	2.5	B	0.28	0.072	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Sodium	1000		56	8.3	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Thallium	0.88		0.56	0.28	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Vanadium	18		0.28	0.066	mg/Kg	☼	11/12/19 17:57	11/14/19 00:31	1
Zinc	52		1.1	0.49	mg/Kg	☼	11/12/19 17:57	11/14/19 13:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:15	1
Boron	0.12	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:15	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:15	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:15	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:15	1
Manganese	1.9		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:15	1
Nickel	0.045		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:15	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:15	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:15	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.072		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 18:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 18:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0063	mg/Kg	☼	11/07/19 14:15	11/08/19 08:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			11/06/19 15:27	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B52 (0-6)

Lab Sample ID: 500-172777-14

Date Collected: 11/01/19 14:20

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 87.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:27	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:27	1
Cobalt	0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:27	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:27	1
Manganese	1.9		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:27	1
Nickel	0.054		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:27	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:27	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:27	1
Zinc	0.020	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.015	J	0.025	0.010	mg/L		11/06/19 14:53	11/07/19 15:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 18:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 18:04	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0061	mg/Kg	☼	11/07/19 14:15	11/08/19 08:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/06/19 15:29	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Date Collected: 11/01/19 14:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 86.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	*	11/02/19 13:02	11/08/19 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 131	11/02/19 13:02	11/08/19 18:14	1
Dibromofluoromethane	85		75 - 126	11/02/19 13:02	11/08/19 18:14	1
1,2-Dichloroethane-d4 (Surr)	80		70 - 134	11/02/19 13:02	11/08/19 18:14	1
Toluene-d8 (Surr)	92		75 - 124	11/02/19 13:02	11/08/19 18:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	*	11/12/19 07:31	11/13/19 18:30	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	*	11/12/19 07:31	11/13/19 18:30	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	*	11/12/19 07:31	11/13/19 18:30	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	*	11/12/19 07:31	11/13/19 18:30	1

Euromins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Date Collected: 11/01/19 14:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2-Methylnaphthalene	0.029	J	0.075	0.0068	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,4-Dinitrophenol	<0.75	*	0.75	0.65	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Phenanthrene	0.17		0.037	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Pyrene	0.021	J	0.037	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Benzo[a]anthracene	0.037		0.037	0.0050	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Date Collected: 11/01/19 14:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 86.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
Benzo[g,h,i]perylene	0.017	J	0.037	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166	11/12/19 07:31	11/13/19 18:30	1
Phenol-d5	71		30 - 153	11/12/19 07:31	11/13/19 18:30	1
Nitrobenzene-d5	73		37 - 147	11/12/19 07:31	11/13/19 18:30	1
2-Fluorobiphenyl	89		43 - 145	11/12/19 07:31	11/13/19 18:30	1
2,4,6-Tribromophenol	73		31 - 143	11/12/19 07:31	11/13/19 18:30	1
Terphenyl-d14	89		42 - 157	11/12/19 07:31	11/13/19 18:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.1	0.21	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Arsenic	8.7		0.54	0.18	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Barium	30		0.54	0.061	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Beryllium	0.53		0.21	0.050	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Boron	11		2.7	0.25	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Cadmium	0.15	B	0.11	0.019	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Calcium	62000	B	110	18	mg/Kg	☼	11/12/19 17:57	11/14/19 13:53	10
Chromium	12	B	0.54	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Cobalt	13		0.27	0.070	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Copper	33		0.54	0.15	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Iron	19000	B	11	5.6	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Lead	17		0.27	0.12	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Magnesium	28000	B	5.4	2.7	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Manganese	380	B	0.54	0.078	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Nickel	34		0.54	0.16	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Potassium	2200		27	9.5	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Selenium	<0.54		0.54	0.31	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Silver	1.8	B	0.27	0.069	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Sodium	460		54	7.9	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Thallium	0.70		0.54	0.27	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Vanadium	13		0.27	0.063	mg/Kg	☼	11/12/19 17:57	11/14/19 00:39	1
Zinc	52		1.1	0.47	mg/Kg	☼	11/12/19 17:57	11/14/19 13:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:32	1
Boron	0.12	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Date Collected: 11/01/19 14:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 86.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:32	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:32	1
Cobalt	0.018	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:32	1
Iron	0.20	J	0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:32	1
Manganese	1.9		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:32	1
Nickel	0.041		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:32	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:32	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:32	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.015	J	0.025	0.010	mg/L		11/06/19 14:53	11/07/19 16:00	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 18:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 18:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.017	0.0058	mg/Kg	☼	11/07/19 14:15	11/08/19 08:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/06/19 15:31	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0095	J	0.016	0.0071	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/02/19 13:02	11/08/19 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	11/02/19 13:02	11/08/19 18:39	1
Dibromofluoromethane	88		75 - 126	11/02/19 13:02	11/08/19 18:39	1
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	11/02/19 13:02	11/08/19 18:39	1
Toluene-d8 (Surr)	90		75 - 124	11/02/19 13:02	11/08/19 18:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2-Methylnaphthalene	0.014	J	0.080	0.0073	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Phenanthrene	0.079		0.039	0.0055	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Pyrene	0.017	J	0.039	0.0079	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Benzo[a]anthracene	0.026	J	0.039	0.0053	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 18:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		31 - 166				11/12/19 07:31	11/13/19 18:55	1
Phenol-d5	68		30 - 153				11/12/19 07:31	11/13/19 18:55	1
Nitrobenzene-d5	69		37 - 147				11/12/19 07:31	11/13/19 18:55	1
2-Fluorobiphenyl	87		43 - 145				11/12/19 07:31	11/13/19 18:55	1
2,4,6-Tribromophenol	75		31 - 143				11/12/19 07:31	11/13/19 18:55	1
Terphenyl-d14	89		42 - 157				11/12/19 07:31	11/13/19 18:55	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.24	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Arsenic	5.1		0.61	0.21	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Barium	41		0.61	0.069	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Beryllium	0.59		0.24	0.057	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Boron	15		3.0	0.28	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Cadmium	0.15	B	0.12	0.022	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Calcium	64000	B	120	21	mg/Kg	☼	11/12/19 17:57	11/14/19 13:57	10
Chromium	16	B	0.61	0.30	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Cobalt	12		0.30	0.079	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Copper	25		0.61	0.17	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Iron	17000	B	12	6.3	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Lead	19		0.30	0.14	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Magnesium	28000	B	6.1	3.0	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Manganese	350	B	0.61	0.088	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Nickel	32		0.61	0.18	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Potassium	3100		30	11	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Selenium	0.45	J	0.61	0.36	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Silver	2.4	B	0.30	0.078	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Sodium	630		61	9.0	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Thallium	0.54	J	0.61	0.30	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Vanadium	18		0.30	0.071	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1
Zinc	53		1.2	0.53	mg/Kg	☼	11/12/19 17:57	11/14/19 00:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:36	1
Boron	0.13	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:36	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:36	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:36	1
Iron	0.36	J	0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:36	1
Manganese	2.5		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:36	1
Nickel	0.044		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:36	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:36	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:36	1
Zinc	0.037	J	0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:36	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.026		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 16:04	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 18:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 18:19	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.019	0.0064	mg/Kg	☼	11/07/19 14:15	11/08/19 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/06/19 15:34	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0086	J	0.019	0.0083	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/02/19 13:02	11/08/19 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	11/02/19 13:02	11/08/19 19:05	1
Dibromofluoromethane	86		75 - 126	11/02/19 13:02	11/08/19 19:05	1
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	11/02/19 13:02	11/08/19 19:05	1
Toluene-d8 (Surr)	88		75 - 124	11/02/19 13:02	11/08/19 19:05	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,4-Dinitrophenol	<0.70 *		0.70	0.61	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Acenaphthylene	<0.034		0.034	0.0046	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Acenaphthene	<0.034		0.034	0.0062	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Fluorene	<0.034		0.034	0.0049	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Phenanthrene	<0.034		0.034	0.0048	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Anthracene	<0.034		0.034	0.0058	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Carbazole	<0.17		0.17	0.086	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Fluoranthene	<0.034		0.034	0.0064	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Pyrene	<0.034		0.034	0.0069	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Benzof[a]anthracene	<0.034		0.034	0.0047	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.034		0.034	0.0094	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Benzo[b]fluoranthene	<0.034		0.034	0.0075	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Benzo[a]pyrene	<0.034		0.034	0.0067	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0090	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	11/12/19 07:31	11/13/19 12:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	40		31 - 166				11/12/19 07:31	11/13/19 12:22	1
Phenol-d5	45		30 - 153				11/12/19 07:31	11/13/19 12:22	1
Nitrobenzene-d5	45		37 - 147				11/12/19 07:31	11/13/19 12:22	1
2-Fluorobiphenyl	59		43 - 145				11/12/19 07:31	11/13/19 12:22	1
2,4,6-Tribromophenol	93		31 - 143				11/12/19 07:31	11/13/19 12:22	1
Terphenyl-d14	95		42 - 157				11/12/19 07:31	11/13/19 12:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.1	0.20	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Arsenic	0.41	J	0.53	0.18	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Barium	1.0		0.53	0.060	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Beryllium	0.052	J	0.21	0.049	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Boron	7.9		2.6	0.25	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Cadmium	0.092	J B	0.11	0.019	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Calcium	210000	B	110	18	mg/Kg	☼	11/12/19 17:57	11/14/19 11:30	10
Chromium	0.91	B	0.53	0.26	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Cobalt	0.63	J	1.3	0.34	mg/Kg	☼	11/12/19 17:57	11/14/19 11:14	5
Copper	<0.53		0.53	0.15	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Iron	1500	B	11	5.5	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Lead	1.6		1.3	0.61	mg/Kg	☼	11/12/19 17:57	11/14/19 11:14	5
Magnesium	130000	B ^	26	13	mg/Kg	☼	11/12/19 17:57	11/14/19 11:14	5
Manganese	94	B	0.53	0.076	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Nickel	4.0		2.6	0.76	mg/Kg	☼	11/12/19 17:57	11/14/19 11:14	5
Potassium	230		26	9.3	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Silver	0.15	J B	0.26	0.068	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Sodium	240		53	7.8	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Thallium	<2.6		2.6	1.3	mg/Kg	☼	11/12/19 17:57	11/14/19 11:14	5
Vanadium	0.66		0.26	0.062	mg/Kg	☼	11/12/19 17:57	11/14/19 00:55	1
Zinc	<5.3		5.3	2.3	mg/Kg	☼	11/12/19 17:57	11/14/19 11:14	5

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 21:54	1
Boron	0.087	J B	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 21:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 21:54	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:54	1
Cobalt	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:54	1
Iron	1.6		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 21:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 21:54	1
Manganese	0.30		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:54	1
Nickel	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:54	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 21:54	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 21:54	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 21:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 16:08	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 18:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 18:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 10:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016	0.0052	mg/Kg	☼	11/07/19 14:15	11/08/19 08:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			11/06/19 15:36	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

GC/MS VOA

Analysis Batch: 514293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	8260B	514348
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	8260B	514348
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	8260B	514348
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	8260B	514348
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	8260B	514348
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	8260B	514348
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	8260B	514348
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	8260B	514348
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	8260B	514348
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	8260B	514348
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	8260B	514348
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	8260B	514348
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	8260B	514348
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	8260B	514348
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	8260B	514348
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	8260B	514348
MB 500-514293/8	Method Blank	Total/NA	Solid	8260B	
LCS 500-514293/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-514293/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 514348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	5035	
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	5035	
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	5035	
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	5035	
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	5035	
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	5035	
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	5035	
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	5035	
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	5035	
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	5035	
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	5035	
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	5035	
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	5035	
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	5035	
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	5035	
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	5035	
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	5035	

Analysis Batch: 514618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	8260B	514348
MB 500-514618/8	Method Blank	Total/NA	Solid	8260B	
LCS 500-514618/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-514618/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

GC/MS Semi VOA

Prep Batch: 514806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	3541	
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	3541	
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	3541	
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	3541	
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	3541	
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	3541	
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	3541	
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	3541	
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	3541	
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	3541	
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	3541	
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	3541	
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	3541	
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	3541	
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	3541	
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	3541	
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	3541	
MB 500-514806/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-514806/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-172777-1 MS	2615V2-01-B01 (0-5)	Total/NA	Solid	3541	
500-172777-1 MSD	2615V2-01-B01 (0-5)	Total/NA	Solid	3541	

Analysis Batch: 514979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	8270D	514806
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	8270D	514806
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	8270D	514806
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	8270D	514806
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	8270D	514806
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	8270D	514806
MB 500-514806/1-A	Method Blank	Total/NA	Solid	8270D	514806
LCS 500-514806/2-A	Lab Control Sample	Total/NA	Solid	8270D	514806
500-172777-1 MS	2615V2-01-B01 (0-5)	Total/NA	Solid	8270D	514806
500-172777-1 MSD	2615V2-01-B01 (0-5)	Total/NA	Solid	8270D	514806

Analysis Batch: 515073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	8270D	514806
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	8270D	514806
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	8270D	514806
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	8270D	514806
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	8270D	514806
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	8270D	514806
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	8270D	514806
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	8270D	514806
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	8270D	514806
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	8270D	514806

Analysis Batch: 515305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	8270D	514806

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals

Leach Batch: 513656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-2	2615V2-01-B02 (0-5)	SPLP East	Solid	1312	
500-172777-3	2615V2-01-B03 (0-4)	SPLP East	Solid	1312	
500-172777-4	2615V2-01-B08 (0-7)	SPLP East	Solid	1312	
500-172777-5	2615V2-01-B09 (0-7)	SPLP East	Solid	1312	
500-172777-6	2615V2-01-B10 (0-7)	SPLP East	Solid	1312	
500-172777-7	2615V2-01-B14 (0-5)	SPLP East	Solid	1312	
500-172777-8	2615V2-01-B14 (5-9)	SPLP East	Solid	1312	
500-172777-9	2615V2-01-B19 (0-7)	SPLP East	Solid	1312	
500-172777-10	2615V2-01-B20 (0-4)	SPLP East	Solid	1312	
500-172777-11	2615V2-01-B20 (4-8)	SPLP East	Solid	1312	
500-172777-12	2615V2-01-B20 (4-8)D	SPLP East	Solid	1312	
500-172777-13	2615V2-01-B21 (0-4)	SPLP East	Solid	1312	
500-172777-14	2615V2-01-B52 (0-6)	SPLP East	Solid	1312	
500-172777-15	2615V2-01-B58 (0-7)	SPLP East	Solid	1312	
500-172777-16	2615V2-01-B59 (0-7)	SPLP East	Solid	1312	
500-172777-17	2615V2-01-B64 (0-6)	SPLP East	Solid	1312	
LB 500-513656/1-B	Method Blank	SPLP East	Solid	1312	
500-172777-17 MS	2615V2-01-B64 (0-6)	SPLP East	Solid	1312	
500-172777-17 DU	2615V2-01-B64 (0-6)	SPLP East	Solid	1312	

Leach Batch: 513659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	TCLP	Solid	1311	
500-172777-2	2615V2-01-B02 (0-5)	TCLP	Solid	1311	
500-172777-3	2615V2-01-B03 (0-4)	TCLP	Solid	1311	
500-172777-4	2615V2-01-B08 (0-7)	TCLP	Solid	1311	
500-172777-5	2615V2-01-B09 (0-7)	TCLP	Solid	1311	
500-172777-6	2615V2-01-B10 (0-7)	TCLP	Solid	1311	
500-172777-7	2615V2-01-B14 (0-5)	TCLP	Solid	1311	
500-172777-8	2615V2-01-B14 (5-9)	TCLP	Solid	1311	
500-172777-9	2615V2-01-B19 (0-7)	TCLP	Solid	1311	
500-172777-10	2615V2-01-B20 (0-4)	TCLP	Solid	1311	
500-172777-11	2615V2-01-B20 (4-8)	TCLP	Solid	1311	
500-172777-12	2615V2-01-B20 (4-8)D	TCLP	Solid	1311	
500-172777-13	2615V2-01-B21 (0-4)	TCLP	Solid	1311	
500-172777-14	2615V2-01-B52 (0-6)	TCLP	Solid	1311	
500-172777-15	2615V2-01-B58 (0-7)	TCLP	Solid	1311	
500-172777-16	2615V2-01-B59 (0-7)	TCLP	Solid	1311	
500-172777-17	2615V2-01-B64 (0-6)	TCLP	Solid	1311	
LB 500-513659/1-B	Method Blank	TCLP	Solid	1311	
LB 500-513659/1-C	Method Blank	TCLP	Solid	1311	
500-172777-9 MS	2615V2-01-B19 (0-7)	TCLP	Solid	1311	
500-172777-16 MS	2615V2-01-B59 (0-7)	TCLP	Solid	1311	
500-172777-9 DU	2615V2-01-B19 (0-7)	TCLP	Solid	1311	
500-172777-16 DU	2615V2-01-B59 (0-7)	TCLP	Solid	1311	

Prep Batch: 513955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	TCLP	Solid	3010A	513659
500-172777-2	2615V2-01-B02 (0-5)	TCLP	Solid	3010A	513659
500-172777-3	2615V2-01-B03 (0-4)	TCLP	Solid	3010A	513659

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Prep Batch: 513955 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-4	2615V2-01-B08 (0-7)	TCLP	Solid	3010A	513659
500-172777-5	2615V2-01-B09 (0-7)	TCLP	Solid	3010A	513659
500-172777-6	2615V2-01-B10 (0-7)	TCLP	Solid	3010A	513659
500-172777-7	2615V2-01-B14 (0-5)	TCLP	Solid	3010A	513659
500-172777-8	2615V2-01-B14 (5-9)	TCLP	Solid	3010A	513659
500-172777-9	2615V2-01-B19 (0-7)	TCLP	Solid	3010A	513659
500-172777-10	2615V2-01-B20 (0-4)	TCLP	Solid	3010A	513659
500-172777-11	2615V2-01-B20 (4-8)	TCLP	Solid	3010A	513659
500-172777-12	2615V2-01-B20 (4-8)D	TCLP	Solid	3010A	513659
500-172777-13	2615V2-01-B21 (0-4)	TCLP	Solid	3010A	513659
500-172777-14	2615V2-01-B52 (0-6)	TCLP	Solid	3010A	513659
500-172777-15	2615V2-01-B58 (0-7)	TCLP	Solid	3010A	513659
500-172777-16	2615V2-01-B59 (0-7)	TCLP	Solid	3010A	513659
500-172777-17	2615V2-01-B64 (0-6)	TCLP	Solid	3010A	513659
LB 500-513659/1-B	Method Blank	TCLP	Solid	3010A	513659
LCS 500-513955/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-172777-16 MS	2615V2-01-B59 (0-7)	TCLP	Solid	3010A	513659
500-172777-16 DU	2615V2-01-B59 (0-7)	TCLP	Solid	3010A	513659

Prep Batch: 513957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-2	2615V2-01-B02 (0-5)	SPLP East	Solid	3010A	513656
500-172777-3	2615V2-01-B03 (0-4)	SPLP East	Solid	3010A	513656
500-172777-4	2615V2-01-B08 (0-7)	SPLP East	Solid	3010A	513656
500-172777-5	2615V2-01-B09 (0-7)	SPLP East	Solid	3010A	513656
500-172777-6	2615V2-01-B10 (0-7)	SPLP East	Solid	3010A	513656
500-172777-7	2615V2-01-B14 (0-5)	SPLP East	Solid	3010A	513656
500-172777-8	2615V2-01-B14 (5-9)	SPLP East	Solid	3010A	513656
500-172777-9	2615V2-01-B19 (0-7)	SPLP East	Solid	3010A	513656
500-172777-10	2615V2-01-B20 (0-4)	SPLP East	Solid	3010A	513656
500-172777-11	2615V2-01-B20 (4-8)	SPLP East	Solid	3010A	513656
500-172777-12	2615V2-01-B20 (4-8)D	SPLP East	Solid	3010A	513656
500-172777-13	2615V2-01-B21 (0-4)	SPLP East	Solid	3010A	513656
500-172777-14	2615V2-01-B52 (0-6)	SPLP East	Solid	3010A	513656
500-172777-15	2615V2-01-B58 (0-7)	SPLP East	Solid	3010A	513656
500-172777-16	2615V2-01-B59 (0-7)	SPLP East	Solid	3010A	513656
500-172777-17	2615V2-01-B64 (0-6)	SPLP East	Solid	3010A	513656
LB 500-513656/1-B	Method Blank	SPLP East	Solid	3010A	513656
LCS 500-513957/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-172777-17 MS	2615V2-01-B64 (0-6)	SPLP East	Solid	3010A	513656
500-172777-17 DU	2615V2-01-B64 (0-6)	SPLP East	Solid	3010A	513656

Prep Batch: 514105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	TCLP	Solid	7470A	513659
500-172777-2	2615V2-01-B02 (0-5)	TCLP	Solid	7470A	513659
500-172777-3	2615V2-01-B03 (0-4)	TCLP	Solid	7470A	513659
500-172777-4	2615V2-01-B08 (0-7)	TCLP	Solid	7470A	513659
500-172777-5	2615V2-01-B09 (0-7)	TCLP	Solid	7470A	513659
500-172777-6	2615V2-01-B10 (0-7)	TCLP	Solid	7470A	513659
500-172777-7	2615V2-01-B14 (0-5)	TCLP	Solid	7470A	513659

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Prep Batch: 514105 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-8	2615V2-01-B14 (5-9)	TCLP	Solid	7470A	513659
500-172777-9	2615V2-01-B19 (0-7)	TCLP	Solid	7470A	513659
500-172777-10	2615V2-01-B20 (0-4)	TCLP	Solid	7470A	513659
500-172777-11	2615V2-01-B20 (4-8)	TCLP	Solid	7470A	513659
500-172777-12	2615V2-01-B20 (4-8)D	TCLP	Solid	7470A	513659
500-172777-13	2615V2-01-B21 (0-4)	TCLP	Solid	7470A	513659
500-172777-14	2615V2-01-B52 (0-6)	TCLP	Solid	7470A	513659
500-172777-15	2615V2-01-B58 (0-7)	TCLP	Solid	7470A	513659
500-172777-16	2615V2-01-B59 (0-7)	TCLP	Solid	7470A	513659
500-172777-17	2615V2-01-B64 (0-6)	TCLP	Solid	7470A	513659
LB 500-513659/1-C	Method Blank	TCLP	Solid	7470A	513659
MB 500-514105/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-514105/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-172777-9 MS	2615V2-01-B19 (0-7)	TCLP	Solid	7470A	513659
500-172777-9 DU	2615V2-01-B19 (0-7)	TCLP	Solid	7470A	513659

Prep Batch: 514120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	7471B	
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	7471B	
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	7471B	
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	7471B	
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	7471B	
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	7471B	
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	7471B	
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	7471B	
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	7471B	
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	7471B	
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	7471B	
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	7471B	
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	7471B	
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	7471B	
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	7471B	
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	7471B	
MB 500-514120/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-514120/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-172777-8 MS	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	
500-172777-8 MSD	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	
500-172777-8 DU	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	

Analysis Batch: 514259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-2	2615V2-01-B02 (0-5)	SPLP East	Solid	6010B	513957
500-172777-3	2615V2-01-B03 (0-4)	SPLP East	Solid	6010B	513957
500-172777-4	2615V2-01-B08 (0-7)	SPLP East	Solid	6010B	513957
500-172777-5	2615V2-01-B09 (0-7)	SPLP East	Solid	6010B	513957
500-172777-6	2615V2-01-B10 (0-7)	SPLP East	Solid	6010B	513957
500-172777-7	2615V2-01-B14 (0-5)	SPLP East	Solid	6010B	513957
500-172777-8	2615V2-01-B14 (5-9)	SPLP East	Solid	6010B	513957
500-172777-9	2615V2-01-B19 (0-7)	SPLP East	Solid	6010B	513957

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Analysis Batch: 514259 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-10	2615V2-01-B20 (0-4)	SPLP East	Solid	6010B	513957
500-172777-11	2615V2-01-B20 (4-8)	SPLP East	Solid	6010B	513957
500-172777-12	2615V2-01-B20 (4-8)D	SPLP East	Solid	6010B	513957
500-172777-13	2615V2-01-B21 (0-4)	SPLP East	Solid	6010B	513957
500-172777-14	2615V2-01-B52 (0-6)	SPLP East	Solid	6010B	513957
500-172777-15	2615V2-01-B58 (0-7)	SPLP East	Solid	6010B	513957
500-172777-16	2615V2-01-B59 (0-7)	SPLP East	Solid	6010B	513957
500-172777-17	2615V2-01-B64 (0-6)	SPLP East	Solid	6010B	513957
LB 500-513656/1-B	Method Blank	SPLP East	Solid	6010B	513957
LCS 500-513957/2-A	Lab Control Sample	Total/NA	Solid	6010B	513957
500-172777-17 MS	2615V2-01-B64 (0-6)	SPLP East	Solid	6010B	513957
500-172777-17 DU	2615V2-01-B64 (0-6)	SPLP East	Solid	6010B	513957

Analysis Batch: 514260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	TCLP	Solid	6010B	513955
500-172777-2	2615V2-01-B02 (0-5)	TCLP	Solid	6010B	513955
500-172777-3	2615V2-01-B03 (0-4)	TCLP	Solid	6010B	513955
500-172777-4	2615V2-01-B08 (0-7)	TCLP	Solid	6010B	513955
500-172777-5	2615V2-01-B09 (0-7)	TCLP	Solid	6010B	513955
500-172777-6	2615V2-01-B10 (0-7)	TCLP	Solid	6010B	513955
500-172777-7	2615V2-01-B14 (0-5)	TCLP	Solid	6010B	513955
500-172777-8	2615V2-01-B14 (5-9)	TCLP	Solid	6010B	513955
500-172777-9	2615V2-01-B19 (0-7)	TCLP	Solid	6010B	513955
500-172777-10	2615V2-01-B20 (0-4)	TCLP	Solid	6010B	513955
500-172777-11	2615V2-01-B20 (4-8)	TCLP	Solid	6010B	513955
500-172777-12	2615V2-01-B20 (4-8)D	TCLP	Solid	6010B	513955
500-172777-13	2615V2-01-B21 (0-4)	TCLP	Solid	6010B	513955
500-172777-14	2615V2-01-B52 (0-6)	TCLP	Solid	6010B	513955
500-172777-15	2615V2-01-B58 (0-7)	TCLP	Solid	6010B	513955
500-172777-16	2615V2-01-B59 (0-7)	TCLP	Solid	6010B	513955
500-172777-17	2615V2-01-B64 (0-6)	TCLP	Solid	6010B	513955
LB 500-513659/1-B	Method Blank	TCLP	Solid	6010B	513955
LCS 500-513955/2-A	Lab Control Sample	Total/NA	Solid	6010B	513955
500-172777-16 MS	2615V2-01-B59 (0-7)	TCLP	Solid	6010B	513955
500-172777-16 DU	2615V2-01-B59 (0-7)	TCLP	Solid	6010B	513955

Analysis Batch: 514337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	7471B	514120
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	7471B	514120
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	7471B	514120
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	7471B	514120
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	7471B	514120
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	7471B	514120
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	7471B	514120
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	514120
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	7471B	514120
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	7471B	514120
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	7471B	514120
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	7471B	514120

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Analysis Batch: 514337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	7471B	514120
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	7471B	514120
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	7471B	514120
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	7471B	514120
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	7471B	514120
MB 500-514120/12-A	Method Blank	Total/NA	Solid	7471B	514120
LCS 500-514120/13-A	Lab Control Sample	Total/NA	Solid	7471B	514120
500-172777-8 MS	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	514120
500-172777-8 MSD	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	514120
500-172777-8 DU	2615V2-01-B14 (5-9)	Total/NA	Solid	7471B	514120

Analysis Batch: 514338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	TCLP	Solid	6020A	513955
500-172777-2	2615V2-01-B02 (0-5)	TCLP	Solid	6020A	513955
500-172777-3	2615V2-01-B03 (0-4)	TCLP	Solid	6020A	513955
500-172777-4	2615V2-01-B08 (0-7)	TCLP	Solid	6020A	513955
500-172777-5	2615V2-01-B09 (0-7)	TCLP	Solid	6020A	513955
500-172777-6	2615V2-01-B10 (0-7)	TCLP	Solid	6020A	513955
500-172777-7	2615V2-01-B14 (0-5)	TCLP	Solid	6020A	513955
500-172777-8	2615V2-01-B14 (5-9)	TCLP	Solid	6020A	513955
500-172777-9	2615V2-01-B19 (0-7)	TCLP	Solid	6020A	513955
500-172777-10	2615V2-01-B20 (0-4)	TCLP	Solid	6020A	513955
500-172777-11	2615V2-01-B20 (4-8)	TCLP	Solid	6020A	513955
500-172777-12	2615V2-01-B20 (4-8)D	TCLP	Solid	6020A	513955
500-172777-13	2615V2-01-B21 (0-4)	TCLP	Solid	6020A	513955
500-172777-14	2615V2-01-B52 (0-6)	TCLP	Solid	6020A	513955
500-172777-15	2615V2-01-B58 (0-7)	TCLP	Solid	6020A	513955
500-172777-16	2615V2-01-B59 (0-7)	TCLP	Solid	6020A	513955
500-172777-17	2615V2-01-B64 (0-6)	TCLP	Solid	6020A	513955
LB 500-513659/1-B	Method Blank	TCLP	Solid	6020A	513955
LCS 500-513955/2-A	Lab Control Sample	Total/NA	Solid	6020A	513955
500-172777-16 MS	2615V2-01-B59 (0-7)	TCLP	Solid	6020A	513955
500-172777-16 DU	2615V2-01-B59 (0-7)	TCLP	Solid	6020A	513955

Analysis Batch: 514357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	TCLP	Solid	7470A	514105
500-172777-2	2615V2-01-B02 (0-5)	TCLP	Solid	7470A	514105
500-172777-3	2615V2-01-B03 (0-4)	TCLP	Solid	7470A	514105
500-172777-4	2615V2-01-B08 (0-7)	TCLP	Solid	7470A	514105
500-172777-5	2615V2-01-B09 (0-7)	TCLP	Solid	7470A	514105
500-172777-6	2615V2-01-B10 (0-7)	TCLP	Solid	7470A	514105
500-172777-7	2615V2-01-B14 (0-5)	TCLP	Solid	7470A	514105
500-172777-8	2615V2-01-B14 (5-9)	TCLP	Solid	7470A	514105
500-172777-9	2615V2-01-B19 (0-7)	TCLP	Solid	7470A	514105
500-172777-10	2615V2-01-B20 (0-4)	TCLP	Solid	7470A	514105
500-172777-11	2615V2-01-B20 (4-8)	TCLP	Solid	7470A	514105
500-172777-12	2615V2-01-B20 (4-8)D	TCLP	Solid	7470A	514105
500-172777-13	2615V2-01-B21 (0-4)	TCLP	Solid	7470A	514105
500-172777-14	2615V2-01-B52 (0-6)	TCLP	Solid	7470A	514105

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Analysis Batch: 514357 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-15	2615V2-01-B58 (0-7)	TCLP	Solid	7470A	514105
500-172777-16	2615V2-01-B59 (0-7)	TCLP	Solid	7470A	514105
500-172777-17	2615V2-01-B64 (0-6)	TCLP	Solid	7470A	514105
LB 500-513659/1-C	Method Blank	TCLP	Solid	7470A	514105
MB 500-514105/12-A	Method Blank	Total/NA	Solid	7470A	514105
LCS 500-514105/13-A	Lab Control Sample	Total/NA	Solid	7470A	514105
500-172777-9 MS	2615V2-01-B19 (0-7)	TCLP	Solid	7470A	514105
500-172777-9 DU	2615V2-01-B19 (0-7)	TCLP	Solid	7470A	514105

Prep Batch: 514992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	3050B	
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	3050B	
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	3050B	
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	3050B	
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	3050B	
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	3050B	
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	3050B	
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	3050B	
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	3050B	
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	3050B	
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	3050B	
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	3050B	
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	3050B	
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	3050B	
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	3050B	
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	3050B	
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	3050B	
MB 500-514992/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-514992/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-172777-1 MS	2615V2-01-B01 (0-5)	Total/NA	Solid	3050B	
500-172777-1 MSD	2615V2-01-B01 (0-5)	Total/NA	Solid	3050B	
500-172777-1 DU	2615V2-01-B01 (0-5)	Total/NA	Solid	3050B	

Analysis Batch: 515256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	6010B	514992
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	6010B	514992
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	6010B	514992
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	6010B	514992
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	6010B	514992
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	6010B	514992
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	6010B	514992
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	6010B	514992
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	6010B	514992
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	6010B	514992
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	6010B	514992
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	6010B	514992
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	6010B	514992
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	6010B	514992

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Analysis Batch: 515256 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	6010B	514992
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	6010B	514992
MB 500-514992/1-A	Method Blank	Total/NA	Solid	6010B	514992
LCS 500-514992/2-A	Lab Control Sample	Total/NA	Solid	6010B	514992
500-172777-1 MS	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1 MSD	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1 DU	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992

Analysis Batch: 515394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	6010B	514992
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	6010B	514992
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	6010B	514992
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	6010B	514992
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	6010B	514992

Analysis Batch: 515395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	6010B	514992
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	6010B	514992
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	6010B	514992
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	6010B	514992
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	6010B	514992
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	6010B	514992
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	6010B	514992
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	6010B	514992
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	6010B	514992
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	6010B	514992
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	6010B	514992
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	6010B	514992
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	6010B	514992
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	6010B	514992
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	6010B	514992
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	6010B	514992
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	6010B	514992
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	6010B	514992
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	6010B	514992
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	6010B	514992
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	6010B	514992
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	6010B	514992
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	6010B	514992
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	6010B	514992
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	6010B	514992
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	6010B	514992
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	6010B	514992
500-172777-1 MS	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1 MS	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1 MSD	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1 MSD	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Metals (Continued)

Analysis Batch: 515395 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1 DU	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992
500-172777-1 DU	2615V2-01-B01 (0-5)	Total/NA	Solid	6010B	514992

General Chemistry

Analysis Batch: 513629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	Moisture	
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	Moisture	
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	Moisture	
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	Moisture	
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	Moisture	
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	Moisture	
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	Moisture	
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	Moisture	
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	Moisture	
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	Moisture	
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	Moisture	
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	Moisture	
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	Moisture	
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	Moisture	
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	Moisture	
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	Moisture	
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	Moisture	
500-172777-6 DU	2615V2-01-B10 (0-7)	Total/NA	Solid	Moisture	

Analysis Batch: 513847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172777-1	2615V2-01-B01 (0-5)	Total/NA	Solid	9045D	
500-172777-2	2615V2-01-B02 (0-5)	Total/NA	Solid	9045D	
500-172777-3	2615V2-01-B03 (0-4)	Total/NA	Solid	9045D	
500-172777-4	2615V2-01-B08 (0-7)	Total/NA	Solid	9045D	
500-172777-5	2615V2-01-B09 (0-7)	Total/NA	Solid	9045D	
500-172777-6	2615V2-01-B10 (0-7)	Total/NA	Solid	9045D	
500-172777-7	2615V2-01-B14 (0-5)	Total/NA	Solid	9045D	
500-172777-8	2615V2-01-B14 (5-9)	Total/NA	Solid	9045D	
500-172777-9	2615V2-01-B19 (0-7)	Total/NA	Solid	9045D	
500-172777-10	2615V2-01-B20 (0-4)	Total/NA	Solid	9045D	
500-172777-11	2615V2-01-B20 (4-8)	Total/NA	Solid	9045D	
500-172777-12	2615V2-01-B20 (4-8)D	Total/NA	Solid	9045D	
500-172777-13	2615V2-01-B21 (0-4)	Total/NA	Solid	9045D	
500-172777-14	2615V2-01-B52 (0-6)	Total/NA	Solid	9045D	
500-172777-15	2615V2-01-B58 (0-7)	Total/NA	Solid	9045D	
500-172777-16	2615V2-01-B59 (0-7)	Total/NA	Solid	9045D	
500-172777-17	2615V2-01-B64 (0-6)	Total/NA	Solid	9045D	
LCS 500-513847/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-513847/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-172777-1 DU	2615V2-01-B01 (0-5)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-172777-1	2615V2-01-B01 (0-5)	101	85	79	92
500-172777-2	2615V2-01-B02 (0-5)	99	83	80	93
500-172777-3	2615V2-01-B03 (0-4)	97	83	80	93
500-172777-4	2615V2-01-B08 (0-7)	98	83	79	94
500-172777-5	2615V2-01-B09 (0-7)	95	85	82	92
500-172777-6	2615V2-01-B10 (0-7)	92	83	79	90
500-172777-7	2615V2-01-B14 (0-5)	104	84	81	93
500-172777-8	2615V2-01-B14 (5-9)	93	85	82	92
500-172777-9	2615V2-01-B19 (0-7)	97	84	92	96
500-172777-10	2615V2-01-B20 (0-4)	92	84	79	90
500-172777-11	2615V2-01-B20 (4-8)	95	85	79	93
500-172777-12	2615V2-01-B20 (4-8)D	92	85	81	93
500-172777-13	2615V2-01-B21 (0-4)	101	85	82	93
500-172777-14	2615V2-01-B52 (0-6)	99	87	81	93
500-172777-15	2615V2-01-B58 (0-7)	95	85	80	92
500-172777-16	2615V2-01-B59 (0-7)	90	88	81	90
500-172777-17	2615V2-01-B64 (0-6)	90	86	81	88
LCS 500-514293/5	Lab Control Sample	90	81	76	92
LCS 500-514618/5	Lab Control Sample	84	98	89	92
LCSD 500-514293/6	Lab Control Sample Dup	90	81	77	92
LCSD 500-514618/6	Lab Control Sample Dup	86	95	86	95
MB 500-514293/8	Method Blank	91	79	76	90
MB 500-514618/8	Method Blank	90	96	89	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-172777-1	2615V2-01-B01 (0-5)	90	77	71	80	74	91
500-172777-1 MS	2615V2-01-B01 (0-5)	87	83	69	77	80	109
500-172777-1 MSD	2615V2-01-B01 (0-5)	84	78	70	82	83	108
500-172777-2	2615V2-01-B02 (0-5)	92	81	76	82	77	97
500-172777-3	2615V2-01-B03 (0-4)	92	83	77	87	74	94
500-172777-4	2615V2-01-B08 (0-7)	90	77	75	86	84	103
500-172777-5	2615V2-01-B09 (0-7)	92	84	74	85	71	97
500-172777-6	2615V2-01-B10 (0-7)	85	72	69	81	59	90
500-172777-7	2615V2-01-B14 (0-5)	72	78	77	97	93	93
500-172777-8	2615V2-01-B14 (5-9)	60	68	69	83	79	93
500-172777-9	2615V2-01-B19 (0-7)	69	71	73	91	36	119
500-172777-10	2615V2-01-B20 (0-4)	46	59	52	68	98	90
500-172777-11	2615V2-01-B20 (4-8)	65	70	72	89	102	98
500-172777-12	2615V2-01-B20 (4-8)D	69	75	75	92	83	93

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPHL
		(31-166)	(30-153)	(37-147)	(43-145)	(31-143)	(42-157)
500-172777-13	2615V2-01-B21 (0-4)	64	69	72	89	81	89
500-172777-14	2615V2-01-B52 (0-6)	51	60	61	85	82	89
500-172777-15	2615V2-01-B58 (0-7)	65	71	73	89	73	89
500-172777-16	2615V2-01-B59 (0-7)	63	68	69	87	75	89
500-172777-17	2615V2-01-B64 (0-6)	40	45	45	59	93	95
LCS 500-514806/2-A	Lab Control Sample	90	80	81	91	89	89
MB 500-514806/1-A	Method Blank	95	83	82	93	69	97

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-514293/8
Matrix: Solid
Analysis Batch: 514293

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<0.020		0.020	0.0087	mg/Kg			11/08/19 11:49	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/08/19 11:49	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/08/19 11:49	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/08/19 11:49	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/08/19 11:49	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/08/19 11:49	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/08/19 11:49	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/08/19 11:49	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/08/19 11:49	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/08/19 11:49	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/08/19 11:49	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/08/19 11:49	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/08/19 11:49	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/08/19 11:49	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/08/19 11:49	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/08/19 11:49	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/08/19 11:49	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/08/19 11:49	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/08/19 11:49	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/08/19 11:49	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/08/19 11:49	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/08/19 11:49	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/08/19 11:49	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/08/19 11:49	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/08/19 11:49	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/08/19 11:49	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/08/19 11:49	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/08/19 11:49	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/08/19 11:49	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/08/19 11:49	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/08/19 11:49	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/08/19 11:49	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/08/19 11:49	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/08/19 11:49	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/08/19 11:49	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/08/19 11:49	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/08/19 11:49	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	91		75 - 131		11/08/19 11:49	1
Dibromofluoromethane	79		75 - 126		11/08/19 11:49	1
1,2-Dichloroethane-d4 (Surr)	76		70 - 134		11/08/19 11:49	1
Toluene-d8 (Surr)	90		75 - 124		11/08/19 11:49	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514293/5

Matrix: Solid

Analysis Batch: 514293

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0523		mg/Kg		105	40 - 150
Benzene	0.0500	0.0482		mg/Kg		96	70 - 125
Bromodichloromethane	0.0500	0.0430		mg/Kg		86	67 - 129
Bromoform	0.0500	0.0429		mg/Kg		86	68 - 136
Bromomethane	0.0500	0.0400		mg/Kg		80	70 - 130
2-Butanone (MEK)	0.0500	0.0573		mg/Kg		115	47 - 138
Carbon disulfide	0.0500	0.0450		mg/Kg		90	70 - 129
Carbon tetrachloride	0.0500	0.0412		mg/Kg		82	75 - 125
Chlorobenzene	0.0500	0.0470		mg/Kg		94	50 - 150
Chloroethane	0.0500	0.0458		mg/Kg		92	75 - 125
Chloroform	0.0500	0.0424		mg/Kg		85	57 - 135
Chloromethane	0.0500	0.0563		mg/Kg		113	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0460		mg/Kg		92	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0473		mg/Kg		95	70 - 125
Dibromochloromethane	0.0500	0.0454		mg/Kg		91	69 - 125
1,1-Dichloroethane	0.0500	0.0472		mg/Kg		94	70 - 125
1,2-Dichloroethane	0.0500	0.0428		mg/Kg		86	70 - 130
1,1-Dichloroethene	0.0500	0.0450		mg/Kg		90	70 - 120
1,2-Dichloropropane	0.0500	0.0506		mg/Kg		101	70 - 125
Ethylbenzene	0.0500	0.0498		mg/Kg		100	61 - 136
2-Hexanone	0.0500	0.0597		mg/Kg		119	48 - 146
Methylene Chloride	0.0500	0.0463		mg/Kg		93	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0580		mg/Kg		116	50 - 148
Methyl tert-butyl ether	0.0500	0.0445		mg/Kg		89	50 - 140
Styrene	0.0500	0.0480		mg/Kg		96	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0490		mg/Kg		98	70 - 122
Tetrachloroethene	0.0500	0.0492		mg/Kg		98	70 - 124
Toluene	0.0500	0.0494		mg/Kg		99	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0457		mg/Kg		91	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0455		mg/Kg		91	70 - 125
1,1,1-Trichloroethane	0.0500	0.0429		mg/Kg		86	70 - 128
1,1,2-Trichloroethane	0.0500	0.0480		mg/Kg		96	70 - 125
Trichloroethene	0.0500	0.0478		mg/Kg		96	70 - 125
Vinyl acetate	0.0500	0.0540		mg/Kg		108	40 - 153
Vinyl chloride	0.0500	0.0550		mg/Kg		110	70 - 125
Xylenes, Total	0.100	0.0951		mg/Kg		95	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		75 - 131
Dibromofluoromethane	81		75 - 126
1,2-Dichloroethane-d4 (Surr)	76		70 - 134
Toluene-d8 (Surr)	92		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-514293/6

Matrix: Solid

Analysis Batch: 514293

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0485		mg/Kg		97	40 - 150	8	30
Benzene	0.0500	0.0467		mg/Kg		93	70 - 125	3	30
Bromodichloromethane	0.0500	0.0409		mg/Kg		82	67 - 129	5	30
Bromoform	0.0500	0.0410		mg/Kg		82	68 - 136	5	30
Bromomethane	0.0500	0.0362		mg/Kg		72	70 - 130	10	30
2-Butanone (MEK)	0.0500	0.0506		mg/Kg		101	47 - 138	12	30
Carbon disulfide	0.0500	0.0426		mg/Kg		85	70 - 129	5	30
Carbon tetrachloride	0.0500	0.0394		mg/Kg		79	75 - 125	4	30
Chlorobenzene	0.0500	0.0449		mg/Kg		90	50 - 150	4	30
Chloroethane	0.0500	0.0402		mg/Kg		80	75 - 125	13	30
Chloroform	0.0500	0.0407		mg/Kg		81	57 - 135	4	30
Chloromethane	0.0500	0.0507		mg/Kg		101	70 - 125	10	30
cis-1,2-Dichloroethene	0.0500	0.0440		mg/Kg		88	70 - 125	4	30
cis-1,3-Dichloropropene	0.0500	0.0452		mg/Kg		90	70 - 125	4	30
Dibromochloromethane	0.0500	0.0432		mg/Kg		86	69 - 125	5	30
1,1-Dichloroethane	0.0500	0.0459		mg/Kg		92	70 - 125	3	30
1,2-Dichloroethane	0.0500	0.0411		mg/Kg		82	70 - 130	4	30
1,1-Dichloroethene	0.0500	0.0429		mg/Kg		86	70 - 120	5	30
1,2-Dichloropropane	0.0500	0.0481		mg/Kg		96	70 - 125	5	30
Ethylbenzene	0.0500	0.0477		mg/Kg		95	61 - 136	4	30
2-Hexanone	0.0500	0.0545		mg/Kg		109	48 - 146	9	30
Methylene Chloride	0.0500	0.0447		mg/Kg		89	70 - 126	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0535		mg/Kg		107	50 - 148	8	30
Methyl tert-butyl ether	0.0500	0.0429		mg/Kg		86	50 - 140	4	30
Styrene	0.0500	0.0457		mg/Kg		91	70 - 125	5	30
1,1,2,2-Tetrachloroethane	0.0500	0.0467		mg/Kg		93	70 - 122	5	30
Tetrachloroethene	0.0500	0.0464		mg/Kg		93	70 - 124	6	30
Toluene	0.0500	0.0471		mg/Kg		94	70 - 125	5	30
trans-1,2-Dichloroethene	0.0500	0.0435		mg/Kg		87	70 - 125	5	30
trans-1,3-Dichloropropene	0.0500	0.0437		mg/Kg		87	70 - 125	4	30
1,1,1-Trichloroethane	0.0500	0.0414		mg/Kg		83	70 - 128	4	30
1,1,2-Trichloroethane	0.0500	0.0449		mg/Kg		90	70 - 125	7	30
Trichloroethene	0.0500	0.0462		mg/Kg		92	70 - 125	3	30
Vinyl acetate	0.0500	0.0506		mg/Kg		101	40 - 153	6	30
Vinyl chloride	0.0500	0.0501		mg/Kg		100	70 - 125	9	30
Xylenes, Total	0.100	0.0908		mg/Kg		91	53 - 147	5	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		75 - 131
Dibromofluoromethane	81		75 - 126
1,2-Dichloroethane-d4 (Surr)	77		70 - 134
Toluene-d8 (Surr)	92		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-514618/8
Matrix: Solid
Analysis Batch: 514618

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<0.020		0.020	0.0087	mg/Kg			11/11/19 11:49	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/11/19 11:49	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/11/19 11:49	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/11/19 11:49	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/11/19 11:49	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/11/19 11:49	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/11/19 11:49	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/11/19 11:49	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/11/19 11:49	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/11/19 11:49	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/11/19 11:49	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/11/19 11:49	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/11/19 11:49	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/11/19 11:49	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/11/19 11:49	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/11/19 11:49	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/11/19 11:49	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/11/19 11:49	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/11/19 11:49	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/11/19 11:49	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/11/19 11:49	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/11/19 11:49	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/11/19 11:49	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/11/19 11:49	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/11/19 11:49	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/11/19 11:49	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/11/19 11:49	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/11/19 11:49	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/11/19 11:49	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/11/19 11:49	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/11/19 11:49	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/11/19 11:49	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/11/19 11:49	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/11/19 11:49	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/11/19 11:49	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/11/19 11:49	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/11/19 11:49	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	90		75 - 131		11/11/19 11:49	1
Dibromofluoromethane	96		75 - 126		11/11/19 11:49	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 134		11/11/19 11:49	1
Toluene-d8 (Surr)	95		75 - 124		11/11/19 11:49	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514618/5
Matrix: Solid
Analysis Batch: 514618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0472		mg/Kg		94	40 - 150
Benzene	0.0500	0.0496		mg/Kg		99	70 - 125
Bromodichloromethane	0.0500	0.0464		mg/Kg		93	67 - 129
Bromoform	0.0500	0.0463		mg/Kg		93	68 - 136
Bromomethane	0.0500	0.0536		mg/Kg		107	70 - 130
2-Butanone (MEK)	0.0500	0.0427		mg/Kg		85	47 - 138
Carbon disulfide	0.0500	0.0571		mg/Kg		114	70 - 129
Carbon tetrachloride	0.0500	0.0491		mg/Kg		98	75 - 125
Chlorobenzene	0.0500	0.0469		mg/Kg		94	50 - 150
Chloroethane	0.0500	0.0652	*	mg/Kg		130	75 - 125
Chloroform	0.0500	0.0480		mg/Kg		96	57 - 135
Chloromethane	0.0500	0.0492		mg/Kg		98	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0503		mg/Kg		101	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0436		mg/Kg		87	70 - 125
Dibromochloromethane	0.0500	0.0453		mg/Kg		91	69 - 125
1,1-Dichloroethane	0.0500	0.0507		mg/Kg		101	70 - 125
1,2-Dichloroethane	0.0500	0.0467		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0500	0.0528		mg/Kg		106	70 - 120
1,2-Dichloropropane	0.0500	0.0497		mg/Kg		99	70 - 125
Ethylbenzene	0.0500	0.0471		mg/Kg		94	61 - 136
2-Hexanone	0.0500	0.0448		mg/Kg		90	48 - 146
Methylene Chloride	0.0500	0.0492		mg/Kg		98	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0435		mg/Kg		87	50 - 148
Methyl tert-butyl ether	0.0500	0.0497		mg/Kg		99	50 - 140
Styrene	0.0500	0.0448		mg/Kg		90	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0463		mg/Kg		93	70 - 122
Tetrachloroethene	0.0500	0.0510		mg/Kg		102	70 - 124
Toluene	0.0500	0.0458		mg/Kg		92	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0536		mg/Kg		107	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0432		mg/Kg		86	70 - 125
1,1,1-Trichloroethane	0.0500	0.0489		mg/Kg		98	70 - 128
1,1,2-Trichloroethane	0.0500	0.0459		mg/Kg		92	70 - 125
Trichloroethene	0.0500	0.0514		mg/Kg		103	70 - 125
Vinyl acetate	0.0500	0.0361		mg/Kg		72	40 - 153
Vinyl chloride	0.0500	0.0515		mg/Kg		103	70 - 125
Xylenes, Total	0.100	0.0880		mg/Kg		88	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	84		75 - 131
Dibromofluoromethane	98		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	92		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-514618/6

Matrix: Solid

Analysis Batch: 514618

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0483		mg/Kg		97	40 - 150	2	30
Benzene	0.0500	0.0425		mg/Kg		85	70 - 125	15	30
Bromodichloromethane	0.0500	0.0404		mg/Kg		81	67 - 129	14	30
Bromoform	0.0500	0.0408		mg/Kg		82	68 - 136	13	30
Bromomethane	0.0500	0.0503		mg/Kg		101	70 - 130	6	30
2-Butanone (MEK)	0.0500	0.0429		mg/Kg		86	47 - 138	0	30
Carbon disulfide	0.0500	0.0464		mg/Kg		93	70 - 129	21	30
Carbon tetrachloride	0.0500	0.0426		mg/Kg		85	75 - 125	14	30
Chlorobenzene	0.0500	0.0418		mg/Kg		84	50 - 150	12	30
Chloroethane	0.0500	0.0630	*	mg/Kg		126	75 - 125	4	30
Chloroform	0.0500	0.0413		mg/Kg		83	57 - 135	15	30
Chloromethane	0.0500	0.0456		mg/Kg		91	70 - 125	7	30
cis-1,2-Dichloroethene	0.0500	0.0431		mg/Kg		86	70 - 125	16	30
cis-1,3-Dichloropropene	0.0500	0.0386		mg/Kg		77	70 - 125	12	30
Dibromochloromethane	0.0500	0.0393		mg/Kg		79	69 - 125	14	30
1,1-Dichloroethane	0.0500	0.0442		mg/Kg		88	70 - 125	14	30
1,2-Dichloroethane	0.0500	0.0398		mg/Kg		80	70 - 130	16	30
1,1-Dichloroethene	0.0500	0.0446		mg/Kg		89	70 - 120	17	30
1,2-Dichloropropane	0.0500	0.0427		mg/Kg		85	70 - 125	15	30
Ethylbenzene	0.0500	0.0427		mg/Kg		85	61 - 136	10	30
2-Hexanone	0.0500	0.0451		mg/Kg		90	48 - 146	0	30
Methylene Chloride	0.0500	0.0412		mg/Kg		82	70 - 126	18	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0438		mg/Kg		88	50 - 148	1	30
Methyl tert-butyl ether	0.0500	0.0417		mg/Kg		83	50 - 140	18	30
Styrene	0.0500	0.0398		mg/Kg		80	70 - 125	12	30
1,1,2,2-Tetrachloroethane	0.0500	0.0406		mg/Kg		81	70 - 122	13	30
Tetrachloroethene	0.0500	0.0455		mg/Kg		91	70 - 124	11	30
Toluene	0.0500	0.0412		mg/Kg		82	70 - 125	11	30
trans-1,2-Dichloroethene	0.0500	0.0445		mg/Kg		89	70 - 125	19	30
trans-1,3-Dichloropropene	0.0500	0.0379		mg/Kg		76	70 - 125	13	30
1,1,1-Trichloroethane	0.0500	0.0428		mg/Kg		86	70 - 128	13	30
1,1,2-Trichloroethane	0.0500	0.0412		mg/Kg		82	70 - 125	11	30
Trichloroethene	0.0500	0.0443		mg/Kg		89	70 - 125	15	30
Vinyl acetate	0.0500	0.0351		mg/Kg		70	40 - 153	3	30
Vinyl chloride	0.0500	0.0491		mg/Kg		98	70 - 125	5	30
Xylenes, Total	0.100	0.0778		mg/Kg		78	53 - 147	12	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	86		75 - 131
Dibromofluoromethane	95		75 - 126
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-514806/1-A
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514806

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/12/19 07:31	11/12/19 20:38	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-514806/1-A
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514806

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/12/19 07:31	11/12/19 20:38	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/12/19 07:31	11/12/19 20:38	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	95		31 - 166	11/12/19 07:31	11/12/19 20:38	1
Phenol-d5	83		30 - 153	11/12/19 07:31	11/12/19 20:38	1
Nitrobenzene-d5	82		37 - 147	11/12/19 07:31	11/12/19 20:38	1
2-Fluorobiphenyl	93		43 - 145	11/12/19 07:31	11/12/19 20:38	1
2,4,6-Tribromophenol	69		31 - 143	11/12/19 07:31	11/12/19 20:38	1
Terphenyl-d14	97		42 - 157	11/12/19 07:31	11/12/19 20:38	1

Lab Sample ID: LCS 500-514806/2-A
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-chloroethyl)ether	1.33	0.954		mg/Kg		72	55 - 111
1,3-Dichlorobenzene	1.33	1.13		mg/Kg		85	65 - 124
1,4-Dichlorobenzene	1.33	1.12		mg/Kg		84	61 - 110
1,2-Dichlorobenzene	1.33	1.16		mg/Kg		87	62 - 110
2-Methylphenol	1.33	1.08		mg/Kg		81	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.849		mg/Kg		64	40 - 124
N-Nitrosodi-n-propylamine	1.33	0.920		mg/Kg		69	56 - 118
Hexachloroethane	1.33	1.11		mg/Kg		84	60 - 114
2-Chlorophenol	1.33	1.16		mg/Kg		87	64 - 110
Nitrobenzene	1.33	1.14		mg/Kg		85	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.07		mg/Kg		80	60 - 112
1,2,4-Trichlorobenzene	1.33	1.19		mg/Kg		89	66 - 117
Isophorone	1.33	1.03		mg/Kg		77	55 - 110
2,4-Dimethylphenol	1.33	1.04		mg/Kg		78	60 - 110
Hexachlorobutadiene	1.33	1.14		mg/Kg		86	56 - 120
Naphthalene	1.33	1.18		mg/Kg		89	63 - 110
2,4-Dichlorophenol	1.33	1.15		mg/Kg		86	58 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514806/2-A

Matrix: Solid

Analysis Batch: 514979

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 514806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.11		mg/Kg		83	30 - 150
2,4,6-Trichlorophenol	1.33	1.00		mg/Kg		75	57 - 120
2,4,5-Trichlorophenol	1.33	1.02		mg/Kg		76	50 - 120
Hexachlorocyclopentadiene	1.33	0.661	J	mg/Kg		50	10 - 133
2-Methylnaphthalene	1.33	1.46		mg/Kg		110	69 - 112
2-Nitroaniline	1.33	1.17		mg/Kg		88	57 - 124
2-Chloronaphthalene	1.33	1.27		mg/Kg		95	69 - 114
4-Chloro-3-methylphenol	1.33	1.03		mg/Kg		77	65 - 122
2,6-Dinitrotoluene	1.33	1.26		mg/Kg		95	70 - 123
2-Nitrophenol	1.33	1.11		mg/Kg		83	60 - 120
3-Nitroaniline	1.33	1.19		mg/Kg		89	40 - 122
Dimethyl phthalate	1.33	1.23		mg/Kg		92	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		9	10 - 100
Acenaphthylene	1.33	1.28		mg/Kg		96	68 - 120
2,4-Dinitrotoluene	1.33	1.15		mg/Kg		86	69 - 124
Acenaphthene	1.33	1.27		mg/Kg		95	65 - 124
Dibenzofuran	1.33	1.24		mg/Kg		93	66 - 115
4-Nitrophenol	2.67	1.15		mg/Kg		43	30 - 122
Fluorene	1.33	1.28		mg/Kg		96	62 - 120
4-Nitroaniline	1.33	1.04		mg/Kg		78	60 - 160
4-Bromophenyl phenyl ether	1.33	1.16		mg/Kg		87	68 - 118
Hexachlorobenzene	1.33	1.31		mg/Kg		98	63 - 124
Diethyl phthalate	1.33	1.12		mg/Kg		84	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.21		mg/Kg		90	62 - 119
Pentachlorophenol	2.67	0.708		mg/Kg		27	13 - 112
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		94	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.515	J	mg/Kg		19	10 - 110
Phenanthrene	1.33	1.21		mg/Kg		90	62 - 120
Anthracene	1.33	1.21		mg/Kg		91	70 - 114
Carbazole	1.33	1.33		mg/Kg		100	65 - 142
Di-n-butyl phthalate	1.33	1.21		mg/Kg		91	65 - 120
Fluoranthene	1.33	1.21		mg/Kg		91	62 - 120
Pyrene	1.33	1.28		mg/Kg		96	61 - 128
Butyl benzyl phthalate	1.33	1.27		mg/Kg		96	71 - 129
Benzo[a]anthracene	1.33	1.25		mg/Kg		94	67 - 122
Chrysene	1.33	1.22		mg/Kg		91	63 - 120
3,3'-Dichlorobenzidine	1.33	1.12		mg/Kg		84	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.28		mg/Kg		96	72 - 131
Di-n-octyl phthalate	1.33	1.24		mg/Kg		93	68 - 134
Benzo[b]fluoranthene	1.33	1.48		mg/Kg		111	69 - 129
Benzo[k]fluoranthene	1.33	1.31		mg/Kg		98	68 - 127
Benzo[a]pyrene	1.33	1.37		mg/Kg		103	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.37		mg/Kg		103	68 - 130
Dibenz(a,h)anthracene	1.33	1.32		mg/Kg		99	64 - 131
Benzo[g,h,i]perylene	1.33	1.31		mg/Kg		98	72 - 131
3 & 4 Methylphenol	1.33	1.04		mg/Kg		78	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-514806/2-A
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514806

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	90		31 - 166
Phenol-d5	80		30 - 153
Nitrobenzene-d5	81		37 - 147
2-Fluorobiphenyl	91		43 - 145
2,4,6-Tribromophenol	89		31 - 143
Terphenyl-d14	89		42 - 157

Lab Sample ID: 500-172777-1 MS
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.19		1.50	1.30		mg/Kg	☼	86	56 - 122
Bis(2-chloroethyl)ether	<0.19		1.50	1.05		mg/Kg	☼	70	55 - 111
1,3-Dichlorobenzene	<0.19		1.50	1.24		mg/Kg	☼	83	60 - 110
1,4-Dichlorobenzene	<0.19		1.50	1.28		mg/Kg	☼	85	61 - 110
1,2-Dichlorobenzene	<0.19		1.50	1.28		mg/Kg	☼	85	62 - 110
2-Methylphenol	<0.19		1.50	1.41		mg/Kg	☼	94	60 - 120
2,2'-oxybis[1-chloropropane]	<0.19		1.50	0.929		mg/Kg	☼	62	40 - 124
N-Nitrosodi-n-propylamine	<0.076		1.50	1.03		mg/Kg	☼	68	56 - 118
Hexachloroethane	<0.19	F1	1.50	0.691	F1	mg/Kg	☼	46	60 - 114
2-Chlorophenol	<0.19		1.50	1.36		mg/Kg	☼	91	64 - 110
Nitrobenzene	<0.037		1.50	1.27		mg/Kg	☼	84	60 - 116
Bis(2-chloroethoxy)methane	<0.19		1.50	1.17		mg/Kg	☼	78	60 - 112
1,2,4-Trichlorobenzene	<0.19		1.50	1.32		mg/Kg	☼	88	66 - 117
Isophorone	<0.19		1.50	1.09		mg/Kg	☼	73	55 - 110
2,4-Dimethylphenol	<0.37		1.50	1.20		mg/Kg	☼	80	60 - 110
Hexachlorobutadiene	<0.19		1.50	1.22		mg/Kg	☼	81	56 - 120
Naphthalene	0.017	J	1.50	1.37		mg/Kg	☼	90	63 - 110
2,4-Dichlorophenol	<0.37		1.50	1.39		mg/Kg	☼	92	58 - 120
4-Chloroaniline	<0.76		1.50	0.910		mg/Kg	☼	61	30 - 150
2,4,6-Trichlorophenol	<0.37		1.50	1.13		mg/Kg	☼	75	57 - 120
2,4,5-Trichlorophenol	<0.37		1.50	1.16		mg/Kg	☼	77	50 - 120
Hexachlorocyclopentadiene	<0.76	F1	1.50	<0.76	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.017	J F1	1.50	1.88	F1	mg/Kg	☼	124	69 - 112
2-Nitroaniline	<0.19		1.50	1.23		mg/Kg	☼	82	57 - 124
2-Chloronaphthalene	<0.19		1.50	1.36		mg/Kg	☼	91	69 - 114
4-Chloro-3-methylphenol	<0.37		1.50	1.25		mg/Kg	☼	83	65 - 122
2,6-Dinitrotoluene	<0.19		1.50	1.33		mg/Kg	☼	88	70 - 123
2-Nitrophenol	<0.37		1.50	1.29		mg/Kg	☼	86	60 - 120
3-Nitroaniline	<0.37		1.50	1.28		mg/Kg	☼	85	40 - 122
Dimethyl phthalate	<0.19		1.50	1.36		mg/Kg	☼	91	69 - 116
2,4-Dinitrophenol	<0.76	F1 *	3.01	<0.76	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	0.033	J	1.50	1.45		mg/Kg	☼	94	68 - 120
2,4-Dinitrotoluene	<0.19		1.50	1.23		mg/Kg	☼	82	69 - 124
Acenaphthene	0.064		1.50	1.44		mg/Kg	☼	92	65 - 124
Dibenzofuran	<0.19		1.50	1.43		mg/Kg	☼	95	66 - 115
4-Nitrophenol	<0.76	F1 F2	3.01	0.787	F1	mg/Kg	☼	26	30 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-172777-1 MS
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	0.068		1.50	1.49		mg/Kg	☼	95	62 - 120
4-Nitroaniline	<0.37		1.50	1.17		mg/Kg	☼	78	60 - 160
4-Bromophenyl phenyl ether	<0.19		1.50	1.34		mg/Kg	☼	89	68 - 118
Hexachlorobenzene	<0.076		1.50	1.48		mg/Kg	☼	99	63 - 124
Diethyl phthalate	<0.19		1.50	1.20		mg/Kg	☼	80	58 - 120
4-Chlorophenyl phenyl ether	<0.19		1.50	1.26		mg/Kg	☼	84	62 - 119
Pentachlorophenol	<0.76		3.01	0.894		mg/Kg	☼	30	13 - 112
N-Nitrosodiphenylamine	<0.19		1.50	1.46		mg/Kg	☼	97	65 - 112
4,6-Dinitro-2-methylphenol	<0.76		3.01	0.374	J	mg/Kg	☼	12	10 - 110
Phenanthrene	0.84	F1 F2	1.50	2.99	E F1	mg/Kg	☼	143	62 - 120
Anthracene	0.21		1.50	1.89		mg/Kg	☼	112	70 - 114
Carbazole	<0.19		1.50	1.69		mg/Kg	☼	112	65 - 142
Di-n-butyl phthalate	<0.19		1.50	1.40		mg/Kg	☼	93	65 - 120
Fluoranthene	1.6	F1 F2	1.50	3.93	E F1	mg/Kg	☼	156	62 - 120
Pyrene	1.5	F1 F2	1.50	4.83	E F1	mg/Kg	☼	219	61 - 128
Butyl benzyl phthalate	<0.19		1.50	1.92		mg/Kg	☼	128	71 - 129
Benzo[a]anthracene	0.87	F1 F2	1.50	3.22	E F1	mg/Kg	☼	157	67 - 122
Chrysene	0.70	F1 F2	1.50	2.71	E F1	mg/Kg	☼	134	63 - 120
3,3'-Dichlorobenzidine	<0.19	F1 F2	1.50	0.391	F1	mg/Kg	☼	26	35 - 128
Bis(2-ethylhexyl) phthalate	0.092	J	1.50	1.90		mg/Kg	☼	120	72 - 131
Di-n-octyl phthalate	<0.19		1.50	1.30		mg/Kg	☼	87	68 - 134
Benzo[b]fluoranthene	0.72	F1 F2	1.50	3.47	E F1	mg/Kg	☼	183	69 - 129
Benzo[k]fluoranthene	0.84	F1 F2	1.50	3.03	E F1	mg/Kg	☼	146	68 - 127
Benzo[a]pyrene	0.85	F1 F2	1.50	3.02	E F1	mg/Kg	☼	145	65 - 133
Indeno[1,2,3-cd]pyrene	0.34	F1	1.50	1.44		mg/Kg	☼	73	68 - 130
Dibenz(a,h)anthracene	0.045		1.50	1.22		mg/Kg	☼	78	64 - 131
Benzo[g,h,i]perylene	0.35	F1	1.50	1.29	F1	mg/Kg	☼	62	72 - 131
3 & 4 Methylphenol	<0.19		1.50	1.19		mg/Kg	☼	79	57 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	87		31 - 166
Phenol-d5	83		30 - 153
Nitrobenzene-d5	69		37 - 147
2-Fluorobiphenyl	77		43 - 145
2,4,6-Tribromophenol	80		31 - 143
Terphenyl-d14	109		42 - 157

Lab Sample ID: 500-172777-1 MSD
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenol	<0.19		1.51	1.12		mg/Kg	☼	74	56 - 122	15	30
Bis(2-chloroethyl)ether	<0.19		1.51	0.935		mg/Kg	☼	62	55 - 111	11	30
1,3-Dichlorobenzene	<0.19		1.51	1.05		mg/Kg	☼	70	60 - 110	17	30
1,4-Dichlorobenzene	<0.19		1.51	1.06		mg/Kg	☼	70	61 - 110	19	30
1,2-Dichlorobenzene	<0.19		1.51	1.11		mg/Kg	☼	73	62 - 110	14	30
2-Methylphenol	<0.19		1.51	1.23		mg/Kg	☼	81	60 - 120	14	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-172777-1 MSD

Matrix: Solid

Analysis Batch: 514979

Client Sample ID: 2615V2-01-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 514806

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.19		1.51	0.781		mg/Kg	☼	52	40 - 124	17	30
N-Nitrosodi-n-propylamine	<0.076		1.51	0.924		mg/Kg	☼	61	56 - 118	10	30
Hexachloroethane	<0.19	F1	1.51	0.595	F1	mg/Kg	☼	39	60 - 114	15	30
2-Chlorophenol	<0.19		1.51	1.19		mg/Kg	☼	79	64 - 110	13	30
Nitrobenzene	<0.037		1.51	1.16		mg/Kg	☼	77	60 - 116	9	30
Bis(2-chloroethoxy)methane	<0.19		1.51	1.06		mg/Kg	☼	70	60 - 112	10	30
1,2,4-Trichlorobenzene	<0.19		1.51	1.18		mg/Kg	☼	79	66 - 117	11	30
Isophorone	<0.19		1.51	1.02		mg/Kg	☼	67	55 - 110	7	30
2,4-Dimethylphenol	<0.37		1.51	1.19		mg/Kg	☼	79	60 - 110	1	30
Hexachlorobutadiene	<0.19		1.51	1.03		mg/Kg	☼	68	56 - 120	16	30
Naphthalene	0.017	J	1.51	1.26		mg/Kg	☼	82	63 - 110	8	30
2,4-Dichlorophenol	<0.37		1.51	1.30		mg/Kg	☼	86	58 - 120	6	30
4-Chloroaniline	<0.76		1.51	0.834		mg/Kg	☼	55	30 - 150	9	30
2,4,6-Trichlorophenol	<0.37		1.51	1.20		mg/Kg	☼	79	57 - 120	6	30
2,4,5-Trichlorophenol	<0.37		1.51	1.11		mg/Kg	☼	74	50 - 120	4	30
Hexachlorocyclopentadiene	<0.76	F1	1.51	<0.76	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.017	J F1	1.51	1.77	F1	mg/Kg	☼	116	69 - 112	6	30
2-Nitroaniline	<0.19		1.51	1.16		mg/Kg	☼	77	57 - 124	6	30
2-Chloronaphthalene	<0.19		1.51	1.33		mg/Kg	☼	88	69 - 114	2	30
4-Chloro-3-methylphenol	<0.37		1.51	1.19		mg/Kg	☼	79	65 - 122	4	30
2,6-Dinitrotoluene	<0.19		1.51	1.27		mg/Kg	☼	84	70 - 123	4	30
2-Nitrophenol	<0.37		1.51	1.18		mg/Kg	☼	78	60 - 120	9	30
3-Nitroaniline	<0.37		1.51	1.17		mg/Kg	☼	78	40 - 122	9	30
Dimethyl phthalate	<0.19		1.51	1.36		mg/Kg	☼	90	69 - 116	0	30
2,4-Dinitrophenol	<0.76	F1 *	3.02	<0.76	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	0.033	J	1.51	1.40		mg/Kg	☼	90	68 - 120	4	30
2,4-Dinitrotoluene	<0.19		1.51	1.22		mg/Kg	☼	81	69 - 124	0	30
Acenaphthene	0.064		1.51	1.40		mg/Kg	☼	89	65 - 124	3	30
Dibenzofuran	<0.19		1.51	1.39		mg/Kg	☼	92	66 - 115	3	30
4-Nitrophenol	<0.76	F1 F2	3.02	0.569	J F1 F2	mg/Kg	☼	19	30 - 122	32	30
Fluorene	0.068		1.51	1.42		mg/Kg	☼	90	62 - 120	5	30
4-Nitroaniline	<0.37		1.51	1.22		mg/Kg	☼	81	60 - 160	4	30
4-Bromophenyl phenyl ether	<0.19		1.51	1.37		mg/Kg	☼	90	68 - 118	2	30
Hexachlorobenzene	<0.076		1.51	1.46		mg/Kg	☼	96	63 - 124	2	30
Diethyl phthalate	<0.19		1.51	1.21		mg/Kg	☼	80	58 - 120	1	30
4-Chlorophenyl phenyl ether	<0.19		1.51	1.33		mg/Kg	☼	88	62 - 119	6	30
Pentachlorophenol	<0.76		3.02	0.698	J	mg/Kg	☼	23	13 - 112	25	30
N-Nitrosodiphenylamine	<0.19		1.51	1.46		mg/Kg	☼	97	65 - 112	0	30
4,6-Dinitro-2-methylphenol	<0.76		3.02	0.382	J	mg/Kg	☼	13	10 - 110	2	30
Phenanthrene	0.84	F1 F2	1.51	1.92	F2	mg/Kg	☼	71	62 - 120	44	30
Anthracene	0.21		1.51	1.51		mg/Kg	☼	86	70 - 114	23	30
Carbazole	<0.19		1.51	1.60		mg/Kg	☼	106	65 - 142	5	30
Di-n-butyl phthalate	<0.19		1.51	1.38		mg/Kg	☼	92	65 - 120	1	30
Fluoranthene	1.6	F1 F2	1.51	2.24	F1 F2	mg/Kg	☼	43	62 - 120	55	30
Pyrene	1.5	F1 F2	1.51	2.74	E F2	mg/Kg	☼	80	61 - 128	55	30
Butyl benzyl phthalate	<0.19		1.51	1.80		mg/Kg	☼	119	71 - 129	7	30
Benzo[a]anthracene	0.87	F1 F2	1.51	1.89	F2	mg/Kg	☼	68	67 - 122	52	30
Chrysene	0.70	F1 F2	1.51	1.79	F2	mg/Kg	☼	73	63 - 120	41	30
3,3'-Dichlorobenzidine	<0.19	F1 F2	1.51	0.567	F2	mg/Kg	☼	38	35 - 128	37	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-172777-1 MSD
Matrix: Solid
Analysis Batch: 514979

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514806

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Bis(2-ethylhexyl) phthalate	0.092	J	1.51	1.77		mg/Kg	☼	111	72 - 131	7	30
Di-n-octyl phthalate	<0.19		1.51	1.25		mg/Kg	☼	83	68 - 134	4	30
Benzo[b]fluoranthene	0.72	F1 F2	1.51	2.46	F2	mg/Kg	☼	115	69 - 129	34	30
Benzo[k]fluoranthene	0.84	F1 F2	1.51	2.18	F2	mg/Kg	☼	89	68 - 127	33	30
Benzo[a]pyrene	0.85	F1 F2	1.51	0.355	F2 F1	mg/Kg	☼	-33	65 - 133	158	30
Indeno[1,2,3-cd]pyrene	0.34	F1	1.51	1.14	F1	mg/Kg	☼	53	68 - 130	24	30
Dibenz(a,h)anthracene	0.045		1.51	1.05		mg/Kg	☼	66	64 - 131	15	30
Benzo[g,h,i]perylene	0.35	F1	1.51	1.04	F1	mg/Kg	☼	45	72 - 131	21	30
3 & 4 Methylphenol	<0.19		1.51	1.09		mg/Kg	☼	72	57 - 120	9	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	84		31 - 166
Phenol-d5	78		30 - 153
Nitrobenzene-d5	70		37 - 147
2-Fluorobiphenyl	82		43 - 145
2,4,6-Tribromophenol	83		31 - 143
Terphenyl-d14	108		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-513955/2-A
Matrix: Solid
Analysis Batch: 514260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513955

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
Barium	0.500	0.509		mg/L		102		80 - 120
Beryllium	0.0500	0.0505		mg/L		101		80 - 120
Boron	1.00	0.929		mg/L		93		80 - 120
Cadmium	0.0500	0.0500		mg/L		100		80 - 120
Chromium	0.200	0.199		mg/L		99		80 - 120
Cobalt	0.500	0.500		mg/L		100		80 - 120
Iron	1.00	1.11		mg/L		111		80 - 120
Lead	0.100	0.100		mg/L		100		80 - 120
Manganese	0.500	0.508		mg/L		102		80 - 120
Nickel	0.500	0.501		mg/L		100		80 - 120
Selenium	0.100	0.0854		mg/L		85		80 - 120
Silver	0.0500	0.0475		mg/L		95		80 - 120
Zinc	0.500	0.490	J	mg/L		98		80 - 120

Lab Sample ID: LCS 500-513957/2-A
Matrix: Solid
Analysis Batch: 514259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513957

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
Lead	0.100	0.102		mg/L		102		80 - 120
Manganese	0.500	0.496		mg/L		99		80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-514992/1-A
Matrix: Solid
Analysis Batch: 515256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Arsenic	<1.0		1.0	0.34	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Barium	<1.0		1.0	0.11	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Beryllium	<0.40		0.40	0.093	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Boron	<5.0		5.0	0.47	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Cadmium	0.0610	J	0.20	0.036	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Calcium	28.8		20	3.4	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Chromium	0.623	J	1.0	0.50	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Cobalt	<0.50		0.50	0.13	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Copper	<1.0		1.0	0.28	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Iron	19.2	J	20	10	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Lead	<0.50		0.50	0.23	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Magnesium	9.98	J	10	5.0	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Manganese	0.171	J	1.0	0.15	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Nickel	<1.0		1.0	0.29	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Potassium	<50		50	18	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Silver	0.203	J	0.50	0.13	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Sodium	<100		100	15	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Thallium	<1.0		1.0	0.50	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Vanadium	<0.50		0.50	0.12	mg/Kg		11/12/19 17:57	11/13/19 23:01	1
Zinc	<2.0		2.0	0.88	mg/Kg		11/12/19 17:57	11/13/19 23:01	1

Lab Sample ID: LCS 500-514992/2-A
Matrix: Solid
Analysis Batch: 515256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.9		mg/Kg		98	80 - 120
Arsenic	10.0	9.33		mg/Kg		93	80 - 120
Barium	200	189		mg/Kg		94	80 - 120
Beryllium	5.00	4.80		mg/Kg		96	80 - 120
Boron	100	84.7		mg/Kg		85	80 - 120
Cadmium	5.00	4.63		mg/Kg		93	80 - 120
Calcium	1000	902		mg/Kg		90	80 - 120
Chromium	20.0	19.7		mg/Kg		98	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	25.0	24.5		mg/Kg		98	80 - 120
Iron	100	99.5		mg/Kg		100	80 - 120
Lead	10.0	9.22		mg/Kg		92	80 - 120
Magnesium	1000	902		mg/Kg		90	80 - 120
Manganese	50.0	47.3		mg/Kg		95	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Potassium	1000	903		mg/Kg		90	80 - 120
Selenium	10.0	8.69		mg/Kg		87	80 - 120
Silver	5.00	4.56		mg/Kg		91	80 - 120
Sodium	1000	945		mg/Kg		94	80 - 120
Thallium	10.0	8.77		mg/Kg		88	80 - 120
Vanadium	50.0	47.6		mg/Kg		95	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-514992/2-A
Matrix: Solid
Analysis Batch: 515256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514992
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Zinc	50.0	47.7	^	mg/Kg		95	80 - 120

Lab Sample ID: 500-172777-1 MS
Matrix: Solid
Analysis Batch: 515256

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.51	J F1	27.2	6.65	F1	mg/Kg	☼	23	75 - 125
Arsenic	5.7	F1	5.45	9.52	F1	mg/Kg	☼	71	75 - 125
Barium	53		109	150		mg/Kg	☼	89	75 - 125
Beryllium	0.46		2.72	2.87		mg/Kg	☼	88	75 - 125
Boron	14		54.5	55.8		mg/Kg	☼	77	75 - 125
Cadmium	0.41	B	2.72	2.86		mg/Kg	☼	90	75 - 125
Chromium	13	B F1 F2	10.9	20.2	F1	mg/Kg	☼	68	75 - 125
Cobalt	9.6		27.2	35.0		mg/Kg	☼	93	75 - 125
Copper	31	F1 F2	13.6	35.4	F1	mg/Kg	☼	30	75 - 125
Iron	13000	B F2	54.5	9870	4	mg/Kg	☼	-5212	75 - 125
Lead	140	F2	5.45	103	4	mg/Kg	☼	-632	75 - 125
Manganese	320	B	27.2	299	4	mg/Kg	☼	-73	75 - 125
Nickel	21		27.2	43.2		mg/Kg	☼	81	75 - 125
Potassium	1800	F1 F2	545	2680	F1	mg/Kg	☼	156	75 - 125
Selenium	0.41	J F1	5.45	4.42	F1	mg/Kg	☼	74	75 - 125
Silver	1.8	B	2.72	4.36		mg/Kg	☼	94	75 - 125
Sodium	640		545	1180		mg/Kg	☼	99	75 - 125
Thallium	0.34	J	5.45	4.66		mg/Kg	☼	79	75 - 125
Vanadium	14		27.2	35.7		mg/Kg	☼	81	75 - 125

Lab Sample ID: 500-172777-1 MS
Matrix: Solid
Analysis Batch: 515395

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Zinc	88	F1 F2	27.2	92.9	F1	mg/Kg	☼	19	75 - 125

Lab Sample ID: 500-172777-1 MS
Matrix: Solid
Analysis Batch: 515395

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	120000	B	545	134000	4	mg/Kg	☼	1760	75 - 125
Magnesium	66000	B F2	545	71200	4	mg/Kg	☼	998	75 - 125

Lab Sample ID: 500-172777-1 MSD
Matrix: Solid
Analysis Batch: 515256

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.51	J F1	27.7	6.13	F1	mg/Kg	☼	20	75 - 125	8	20
Arsenic	5.7	F1	5.53	10.4		mg/Kg	☼	85	75 - 125	9	20
Barium	53		111	172		mg/Kg	☼	108	75 - 125	14	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-172777-1 MSD

Matrix: Solid

Analysis Batch: 515256

Client Sample ID: 2615V2-01-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 514992

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Beryllium	0.46		2.77	3.06		mg/Kg	☼	94	75 - 125	7	20
Boron	14		55.3	56.5		mg/Kg	☼	78	75 - 125	1	20
Cadmium	0.41	B	2.77	2.93		mg/Kg	☼	91	75 - 125	2	20
Chromium	13	B F1 F2	11.1	26.1	F2	mg/Kg	☼	121	75 - 125	26	20
Cobalt	9.6		27.7	37.3		mg/Kg	☼	100	75 - 125	7	20
Copper	31	F1 F2	13.8	48.8	F1 F2	mg/Kg	☼	127	75 - 125	32	20
Iron	13000	B F2	55.3	12900	4 F2	mg/Kg	☼	373	75 - 125	27	20
Lead	140	F2	5.53	165	4 F2	mg/Kg	☼	506	75 - 125	46	20
Manganese	320	B	27.7	330	4	mg/Kg	☼	40	75 - 125	10	20
Nickel	21		27.7	49.9		mg/Kg	☼	104	75 - 125	14	20
Potassium	1800	F1 F2	553	3330	F1 F2	mg/Kg	☼	272	75 - 125	22	20
Selenium	0.41	J F1	5.53	4.76		mg/Kg	☼	79	75 - 125	7	20
Silver	1.8	B	2.77	4.69		mg/Kg	☼	105	75 - 125	7	20
Sodium	640		553	1220		mg/Kg	☼	106	75 - 125	4	20
Thallium	0.34	J	5.53	4.48		mg/Kg	☼	75	75 - 125	4	20
Vanadium	14		27.7	39.4		mg/Kg	☼	93	75 - 125	10	20

Lab Sample ID: 500-172777-1 MSD

Matrix: Solid

Analysis Batch: 515395

Client Sample ID: 2615V2-01-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 514992

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Zinc	88	F1 F2	27.7	119	F2	mg/Kg	☼	113	75 - 125	25	20

Lab Sample ID: 500-172777-1 MSD

Matrix: Solid

Analysis Batch: 515395

Client Sample ID: 2615V2-01-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 514992

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Calcium	120000	B	553	113000	4	mg/Kg	☼	-2047	75 - 125	17	20
Magnesium	66000	B F2	553	57300	4 F2	mg/Kg	☼	-1525	75 - 125	22	20

Lab Sample ID: 500-172777-1 DU

Matrix: Solid

Analysis Batch: 515256

Client Sample ID: 2615V2-01-B01 (0-5)

Prep Type: Total/NA

Prep Batch: 514992

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
Antimony	0.51	J F1	0.365	J F5	mg/Kg	☼	32	20
Arsenic	5.7	F1	5.31		mg/Kg	☼	6	20
Barium	53		39.7	F3	mg/Kg	☼	29	20
Beryllium	0.46		0.466		mg/Kg	☼	2	20
Boron	14		11.0	F5	mg/Kg	☼	21	20
Cadmium	0.41	B	0.260	F3	mg/Kg	☼	45	20
Chromium	13	B F1 F2	12.2		mg/Kg	☼	4	20
Cobalt	9.6		10.2		mg/Kg	☼	6	20
Copper	31	F1 F2	25.6		mg/Kg	☼	20	20
Iron	13000	B F2	14300		mg/Kg	☼	12	20
Lead	140	F2	43.1	F3	mg/Kg	☼	105	20
Manganese	320	B	258	F3	mg/Kg	☼	21	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-172777-1 DU
Matrix: Solid
Analysis Batch: 515256

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Nickel	21		25.3		mg/Kg	☼	18	20
Potassium	1800	F1 F2	1950		mg/Kg	☼	7	20
Selenium	0.41	J F1	0.433	J	mg/Kg	☼	6	20
Silver	1.8	B	1.93		mg/Kg	☼	8	20
Sodium	640		561		mg/Kg	☼	13	20
Thallium	0.34	J	0.565	F5	mg/Kg	☼	50	20
Vanadium	14		13.4		mg/Kg	☼	2	20

Lab Sample ID: 500-172777-1 DU
Matrix: Solid
Analysis Batch: 515395

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Zinc	88	F1 F2	55.6	F3	mg/Kg	☼	45	20

Lab Sample ID: 500-172777-1 DU
Matrix: Solid
Analysis Batch: 515395

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA
Prep Batch: 514992

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Calcium	120000	B	93100	F3	mg/Kg	☼	29	20
Magnesium	66000	B F2	53200	F3	mg/Kg	☼	21	20

Lab Sample ID: LB 500-513659/1-B
Matrix: Solid
Analysis Batch: 514260

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 513955

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/06/19 14:50	11/07/19 20:05	1
Boron	0.0690	J	0.50	0.050	mg/L		11/06/19 14:50	11/07/19 20:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/06/19 14:50	11/07/19 20:05	1
Chromium	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:05	1
Cobalt	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:05	1
Iron	<0.40		0.40	0.20	mg/L		11/06/19 14:50	11/07/19 20:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:50	11/07/19 20:05	1
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:05	1
Nickel	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:05	1
Selenium	<0.050		0.050	0.020	mg/L		11/06/19 14:50	11/07/19 20:05	1
Silver	<0.025		0.025	0.010	mg/L		11/06/19 14:50	11/07/19 20:05	1
Zinc	<0.50		0.50	0.020	mg/L		11/06/19 14:50	11/07/19 20:05	1

Lab Sample ID: 500-172777-16 MS
Matrix: Solid
Analysis Batch: 514260

Client Sample ID: 2615V2-01-B59 (0-7)
Prep Type: TCLP
Prep Batch: 513955

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Barium	0.71		0.500	1.27		mg/L		112	75 - 125
Beryllium	<0.0040		0.0500	0.0499		mg/L		100	75 - 125
Boron	0.13	J B	1.00	1.05		mg/L		91	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-172777-16 MS
Matrix: Solid
Analysis Batch: 514260

Client Sample ID: 2615V2-01-B59 (0-7)
Prep Type: TCLP
Prep Batch: 513955

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cadmium	<0.0050		0.0500	0.0556		mg/L		111	75 - 125
Chromium	<0.025		0.200	0.195		mg/L		98	75 - 125
Cobalt	0.019	J	0.500	0.553		mg/L		107	75 - 125
Iron	0.36	J	1.00	1.34		mg/L		99	75 - 125
Lead	<0.0075		0.100	0.110		mg/L		110	75 - 125
Manganese	2.5		0.500	3.08	4	mg/L		124	75 - 125
Nickel	0.044		0.500	0.576		mg/L		106	75 - 125
Selenium	<0.050		0.100	0.105		mg/L		105	75 - 125
Silver	<0.025		0.0500	0.0539		mg/L		108	75 - 125
Zinc	0.037	J	0.500	0.568		mg/L		106	75 - 125

Lab Sample ID: 500-172777-16 DU
Matrix: Solid
Analysis Batch: 514260

Client Sample ID: 2615V2-01-B59 (0-7)
Prep Type: TCLP
Prep Batch: 513955

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.71		0.723		mg/L		2	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.13	J B	0.136	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.019	J	0.0183	J	mg/L		1	20
Iron	0.36	J	0.275	J F5	mg/L		26	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	2.5		2.47		mg/L		0.4	20
Nickel	0.044		0.0442		mg/L		0.1	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.037	J	0.0378	J	mg/L		2	20

Lab Sample ID: LB 500-513656/1-B
Matrix: Solid
Analysis Batch: 514259

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 513957

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/06/19 14:53	11/07/19 14:43	1
Manganese	<0.025		0.025	0.010	mg/L		11/06/19 14:53	11/07/19 14:43	1

Lab Sample ID: 500-172777-17 MS
Matrix: Solid
Analysis Batch: 514259

Client Sample ID: 2615V2-01-B64 (0-6)
Prep Type: SPLP East
Prep Batch: 513957

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	<0.0075		0.100	0.104		mg/L		104	75 - 125
Manganese	<0.025		0.500	0.532		mg/L		106	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-172777-17 DU
Matrix: Solid
Analysis Batch: 514259

Client Sample ID: 2615V2-01-B64 (0-6)
Prep Type: SPLP East
Prep Batch: 513957

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	<0.025		<0.025		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-513955/2-A
Matrix: Solid
Analysis Batch: 514338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Prepared	Analyzed
Antimony	0.500	0.511		mg/L		102	11/06/19 14:50	11/07/19 17:14
Thallium	0.100	0.106		mg/L		106	11/06/19 14:50	11/07/19 17:14

Lab Sample ID: LB 500-513659/1-B
Matrix: Solid
Analysis Batch: 514338

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 513955

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		11/06/19 14:50	11/07/19 17:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/06/19 14:50	11/07/19 17:14	1

Lab Sample ID: 500-172777-16 MS
Matrix: Solid
Analysis Batch: 514338

Client Sample ID: 2615V2-01-B59 (0-7)
Prep Type: TCLP
Prep Batch: 513955

Analyte	Sample	Sample	Spike Added	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Antimony	<0.0060		0.500	0.517		mg/L		103	75 - 125
Thallium	<0.0020		0.100	0.109		mg/L		109	75 - 125

Lab Sample ID: 500-172777-16 DU
Matrix: Solid
Analysis Batch: 514338

Client Sample ID: 2615V2-01-B59 (0-7)
Prep Type: TCLP
Prep Batch: 513955

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-514105/12-A
Matrix: Solid
Analysis Batch: 514357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514105

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:26	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-514105/13-A
Matrix: Solid
Analysis Batch: 514357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514105
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00217		mg/L		109	80 - 120

Lab Sample ID: LB 500-513659/1-C
Matrix: Solid
Analysis Batch: 514357

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 514105

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/07/19 10:25	11/08/19 09:29	1

Lab Sample ID: 500-172777-9 MS
Matrix: Solid
Analysis Batch: 514357

Client Sample ID: 2615V2-01-B19 (0-7)
Prep Type: TCLP
Prep Batch: 514105
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00108		mg/L		108	75 - 125

Lab Sample ID: 500-172777-9 DU
Matrix: Solid
Analysis Batch: 514357

Client Sample ID: 2615V2-01-B19 (0-7)
Prep Type: TCLP
Prep Batch: 514105

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-514120/12-A
Matrix: Solid
Analysis Batch: 514337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/07/19 14:15	11/08/19 07:27	1

Lab Sample ID: LCS 500-514120/13-A
Matrix: Solid
Analysis Batch: 514337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514120
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.185		mg/Kg		111	80 - 120

Lab Sample ID: 500-172777-8 MS
Matrix: Solid
Analysis Batch: 514337

Client Sample ID: 2615V2-01-B14 (5-9)
Prep Type: Total/NA
Prep Batch: 514120
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.018	J	0.0995	0.110		mg/Kg	☼	93	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-172777-8 MSD
Matrix: Solid
Analysis Batch: 514337

Client Sample ID: 2615V2-01-B14 (5-9)
Prep Type: Total/NA
Prep Batch: 514120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Mercury	0.018	J	0.0995	0.108		mg/Kg	☼	90	75 - 125	2	20

Lab Sample ID: 500-172777-8 DU
Matrix: Solid
Analysis Batch: 514337

Client Sample ID: 2615V2-01-B14 (5-9)
Prep Type: Total/NA
Prep Batch: 514120

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.018	J	0.0200		mg/Kg	☼	11	20

Method: 9045D - pH

Lab Sample ID: 500-172777-1 DU
Matrix: Solid
Analysis Batch: 513847

Client Sample ID: 2615V2-01-B01 (0-5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.4		8.4		SU		0.1	



Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Date Collected: 11/01/19 10:05

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:13	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:20	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:31	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 14:55		
					(End)	11/06/19 14:58		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B01 (0-5)

Lab Sample ID: 500-172777-1

Date Collected: 11/01/19 10:05

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 19:30	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	514979	11/12/19 22:27	NRJ	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/13/19 23:17	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 10:52	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 10:56	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:32	MJG	TAL CHI

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 14:56	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:18	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:23	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:33	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:00		
					(End)	11/06/19 15:02		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B02 (0-5)

Lab Sample ID: 500-172777-2

Date Collected: 11/01/19 10:15

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 12:41	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	514979	11/12/19 22:54	NRJ	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/13/19 23:38	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 11:42	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 11:47	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:34	MJG	TAL CHI

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:00	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:22	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:26	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:34	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:02		
					(End)	11/06/19 15:04		

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B03 (0-4)

Lab Sample ID: 500-172777-3

Date Collected: 11/01/19 10:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 13:06	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	514979	11/12/19 23:21	NRJ	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/13/19 23:42	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 11:59	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 12:03	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:36	MJG	TAL CHI

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Date Collected: 11/01/19 11:00

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:04	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:35	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:29	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:36	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:04		
					(End)	11/06/19 15:07		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B08 (0-7)

Lab Sample ID: 500-172777-4

Date Collected: 11/01/19 11:00

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 13:32	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	514979	11/12/19 23:48	NRJ	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/13/19 23:46	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 12:08	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 12:12	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:38	MJG	TAL CHI

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:09	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:39	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:32	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:37	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847	(Start) 11/06/19 15:07 (End) 11/06/19 15:09	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 13:57	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	514979	11/13/19 00:15	NRJ	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B09 (0-7)

Lab Sample ID: 500-172777-5

Date Collected: 11/01/19 11:25

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/13/19 23:50	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 12:16	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 12:20	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:40	MJG	TAL CHI

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:13	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:44	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:35	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847	(Start) 11/06/19 15:09 (End) 11/06/19 15:11	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 14:23	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	514979	11/13/19 00:42	NRJ	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:02	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 12:24	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B10 (0-7)

Lab Sample ID: 500-172777-6

Date Collected: 11/01/19 12:10

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 12:29	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:42	MJG	TAL CHI

Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Date Collected: 11/01/19 12:35

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:17	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:48	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:37	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:11		
					(End)	11/06/19 15:13		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B14 (0-5)

Lab Sample ID: 500-172777-7

Date Collected: 11/01/19 12:35

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 14:48	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 16:27	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:06	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 12:33	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 12:37	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:44	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Date Collected: 11/01/19 12:42

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:30	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:52	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:40	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:54	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847	(Start) 11/06/19 15:13 (End) 11/06/19 15:16	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B14 (5-9)

Lab Sample ID: 500-172777-8

Date Collected: 11/01/19 12:42

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 15:14	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 16:52	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:10	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 12:50	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 12:54	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:51	MJG	TAL CHI

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:34	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 20:57	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:49	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 09:55	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:16		
					(End)	11/06/19 15:18		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B19 (0-7)

Lab Sample ID: 500-172777-9

Date Collected: 11/01/19 13:04

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514618	11/11/19 14:48	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515305	11/14/19 21:17	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:14	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 12:58	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:02	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 07:59	MJG	TAL CHI

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:39	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:01	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:52	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:00	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B20 (0-4)

Lab Sample ID: 500-172777-10

Date Collected: 11/01/19 13:37

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 16:06	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 13:11	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:18	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515394	11/14/19 10:57	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		5	515394	11/14/19 11:01	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515394	11/14/19 11:05	JEF	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:01	MJG	TAL CHI

Client Sample ID: 2615V2-01-B20 (4-8)

Lab Sample ID: 500-172777-11

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:43	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:06	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:55	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:22		
					(End)	11/06/19 15:25		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)

Lab Sample ID: 500-172777-11

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 16:31	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 17:16	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:22	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 13:07	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:11	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:03	MJG	TAL CHI

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:47	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:10	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 17:58	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:04	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847	(Start) 11/06/19 15:25 (End) 11/06/19 15:27	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 16:57	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 17:41	AJD	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B20 (4-8)D

Lab Sample ID: 500-172777-12

Date Collected: 11/01/19 13:43

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:26	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 13:15	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:19	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:06	MJG	TAL CHI

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:51	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:15	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 18:01	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:27		
					(End)	11/06/19 15:29		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 17:23	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 18:06	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:31	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 13:23	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B21 (0-4)

Lab Sample ID: 500-172777-13

Date Collected: 11/01/19 13:58

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:28	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:08	MJG	TAL CHI

Client Sample ID: 2615V2-01-B52 (0-6)

Lab Sample ID: 500-172777-14

Date Collected: 11/01/19 14:20

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 15:56	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:27	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 18:04	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:14	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:29		
					(End)	11/06/19 15:31		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B52 (0-6)

Lab Sample ID: 500-172777-14

Date Collected: 11/01/19 14:20

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 17:49	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 19:19	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:35	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 13:40	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:45	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:10	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Date Collected: 11/01/19 14:30

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 16:00	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:32	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 18:16	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:15	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:31		
					(End)	11/06/19 15:34		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B58 (0-7)

Lab Sample ID: 500-172777-15

Date Collected: 11/01/19 14:30

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 18:14	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 18:30	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:39	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515395	11/14/19 13:49	EEN	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:53	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:16	MJG	TAL CHI

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 16:04	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:36	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 18:19	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:17	MJG	TAL CHI
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
					(Start)	11/06/19 15:34		
					(End)	11/06/19 15:36		
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B59 (0-7)

Lab Sample ID: 500-172777-16

Date Collected: 11/01/19 14:55

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 18:39	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 18:55	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:51	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515395	11/14/19 13:57	EEN	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:18	MJG	TAL CHI

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			513656	11/05/19 12:53	BEC	TAL CHI
SPLP East	Prep	3010A			513957	11/06/19 14:53	BDE	TAL CHI
SPLP East	Analysis	6010B		1	514259	11/07/19 16:08	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6010B		1	514260	11/07/19 21:54	EEN	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	3010A			513955	11/06/19 14:50	BDE	TAL CHI
TCLP	Analysis	6020A		1	514338	11/07/19 18:31	FXG	TAL CHI
TCLP	Leach	1311			513659	11/05/19 12:53	BEC	TAL CHI
TCLP	Prep	7470A			514105	11/07/19 10:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	514357	11/08/19 10:19	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	513847		SMO	TAL CHI
Total/NA	Analysis	Moisture		1	513629	11/05/19 12:24	LWN	TAL CHI

Client Sample ID: 2615V2-01-B64 (0-6)

Lab Sample ID: 500-172777-17

Date Collected: 11/01/19 15:18

Matrix: Solid

Date Received: 11/01/19 17:40

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			514348	11/02/19 13:02	PMF	TAL CHI
Total/NA	Analysis	8260B		1	514293	11/08/19 19:05	PMF	TAL CHI
Total/NA	Prep	3541			514806	11/12/19 07:31	DX	TAL CHI
Total/NA	Analysis	8270D		1	515073	11/13/19 12:22	AJD	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		1	515256	11/14/19 00:55	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		5	515394	11/14/19 11:14	JEF	TAL CHI
Total/NA	Prep	3050B			514992	11/12/19 17:57	BDE	TAL CHI
Total/NA	Analysis	6010B		10	515394	11/14/19 11:30	JEF	TAL CHI
Total/NA	Prep	7471B			514120	11/07/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	514337	11/08/19 08:20	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-172777-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-172777 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-172777

Chain of Custody Number: _____

Page _____ of _____

Temperature °C of Cooler: 53.54

Client		Client Project #		Preservative		Parameter												Preservative Key	
E+E		1009341.0447.01																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		# of Containers		Matrix												Comments	
176-001-W047E																			
Project Location/State		Lab Project #		Date		Time													
Chicago, IL																			
Sampler		Lab PM																	
AH, JH		R. Wright						VOC		SVOC		Total/CLP		Metals		PH		Percent Solids	
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers		Matrix											
				Date	Time														
1		2615V2-01-B01(0-5)		11/1/19	1005	5	5	X	X	X	X	X	X						
2		2615V2-01-B02(0-5)		11/1/19	1015	5	5	X	X	X	X	X	X						
3		2615V2-01-B03(0-4)		11/1/19	1030	5	5	X	X	X	X	X	X						
4		2615V2-01-B08(0-7)		11/1/19	1100	5	5	X	X	X	X	X	X						
5		2615V2-01-B09(0-7)		11/1/19	1125	5	5	X	X	X	X	X	X						
6		2615V2-01-B10(0-7)		11/1/19	1210	5	5	X	X	X	X	X	X						
7		2615V2-01-B14(0-5)		11/1/19	1235	5	5	X	X	X	X	X	X						
8		2615V2-01-B14(5-9)		11/1/19	1242	5	5	X	X	X	X	X	X						
9		2615V2-01-B19(0-7)		11/1/19	1304	5	5	X	X	X	X	X	X						

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Requested Due Date _____

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>E+E</u>	Date: <u>11/1/19</u>	Time: <u>1540</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/1/19</u>	Time: <u>1540</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/1/19</u>	Time: <u>1540</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/2/19</u>	Time: <u>0545</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/1/19</u>	Time: <u>1740</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/2/19</u>	Time: <u>0545</u>

Lab Courier: TA
Shipped: _____
Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-172777
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments		
E+E		1009311.0477.01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Lab Project #		Sampling		Matrix		Matrix		Comments		
176-001-W047E												
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix		
Chicago, IL												
Sampler		Lab PM		Date		Time		# of Containers		Matrix		
AH, JH		R. Wright										
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/TCLP Metals	pH	Percent Solids	Comments
10		2615V2-01-B20(0-4)	11/1/19	1337	5	S	X	X	X	X	X	
11		2615V2-01-B20(4-8)	11/1/19	1343	5	S	X	X	X	X	X	
12		2615V2-01-B20(4-8)D	11/1/19	1343	5	S	X	X	X	X	X	
13		2615V2-01-B21(0-4)	11/1/19	1358	5	S	X	X	X	X	X	
14		2615V2-01-B52(0-6)	11/1/19	1420	5	S	X	X	X	X	X	
15		2615V2-01-B58(0-7)	11/1/19	1430	5	S	X	X	X	X	X	
16		2615V2-01-B59(0-7)	11/1/19	1455	5	S	X	X	X	X	X	
17		2615V2-01-B64(0-6)	11/1/19	1518	5	S	X	X	X	X	X	

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Requested Due Date _____

Sample Disposal

Return to Client

Disposal by Lab

Archive for _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>E+E</u>	Date: <u>11/1/19</u>	Time: <u>1540</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/1/19</u>	Time: <u>1540</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/1/19</u>	Time: <u>1740</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/2/19</u>	Time: <u>0545</u>

Lab Courier: TA
Shipped: _____
Hand Delivered: _____

Matrix Key

WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-172777-1

Login Number: 172777

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.3,5.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173293-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
11/25/2019 5:39:09 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com
Designee for
Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Job ID: 500-173293-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173293-1

Receipt

The samples were received on 11/11/2019 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.5° C and 5.9° C.

GC/MS VOA

Method 8260B: The laboratory control sample (LCS) for 516317 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The laboratory control sample and laboratory control sample duplicate (LCS/ LCSD) for 516539 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS/ LCSD and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 516260 had 2 analytes outside control limits: 2,2'-oxybis[1-chloropropane] and 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-516260/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1



Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.058		0.022	0.0097	mg/Kg	1	*		8260B	Total/NA
Xylenes, Total	0.0011	J	0.0045	0.00071	mg/Kg	1	*		8260B	Total/NA
Phenanthrene	0.085		0.042	0.0059	mg/Kg	1	*		8270D	Total/NA
Anthracene	0.0075	J	0.042	0.0071	mg/Kg	1	*		8270D	Total/NA
Fluoranthene	0.019	J	0.042	0.0078	mg/Kg	1	*		8270D	Total/NA
Pyrene	0.060		0.042	0.0084	mg/Kg	1	*		8270D	Total/NA
Chrysene	0.034	J	0.042	0.012	mg/Kg	1	*		8270D	Total/NA
Antimony	0.66	J B	1.3	0.25	mg/Kg	1	*		6010B	Total/NA
Arsenic	5.0		0.64	0.22	mg/Kg	1	*		6010B	Total/NA
Barium	31		0.64	0.072	mg/Kg	1	*		6010B	Total/NA
Beryllium	0.61		0.25	0.059	mg/Kg	1	*		6010B	Total/NA
Boron	17		3.2	0.30	mg/Kg	1	*		6010B	Total/NA
Cadmium	0.031	J B	0.13	0.023	mg/Kg	1	*		6010B	Total/NA
Calcium	37000		13	2.2	mg/Kg	1	*		6010B	Total/NA
Chromium	15	B	0.64	0.31	mg/Kg	1	*		6010B	Total/NA
Cobalt	8.8		0.32	0.083	mg/Kg	1	*		6010B	Total/NA
Copper	25	B	0.64	0.18	mg/Kg	1	*		6010B	Total/NA
Iron	16000	B	13	6.6	mg/Kg	1	*		6010B	Total/NA
Lead	11		0.32	0.15	mg/Kg	1	*		6010B	Total/NA
Magnesium	23000		6.4	3.2	mg/Kg	1	*		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (0-5) (Continued)

Lab Sample ID: 500-173293-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	210		0.64	0.092	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.64	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		32	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.64	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.32	0.082	mg/Kg	1	☼	6010B	Total/NA
Sodium	1500		64	9.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.78		0.64	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.32	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	37		1.3	0.56	mg/Kg	1	☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.88		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.034	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.21	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.022		0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.027	J	0.081	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.079		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.013	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.025	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.76	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.2		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	20		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	60000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.70		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	410		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.94		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.97		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (5-10) (Continued)

Lab Sample ID: 500-173293-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.070	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.057		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0064	mg/Kg	1	*	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.048	J	0.083	0.0075	mg/Kg	1	*	8270D	Total/NA
Fluorene	0.0065	J	0.041	0.0058	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.13		0.041	0.0057	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.034	J	0.041	0.0082	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.034	J	0.041	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.85	J B	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	7.6		0.59	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	41		0.59	0.067	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.80		0.24	0.055	mg/Kg	1	*	6010B	Total/NA
Boron	23		2.9	0.27	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.090	J B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA
Calcium	55000		120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	19	B	0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	*	6010B	Total/NA
Copper	31	B	0.59	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	24000	B	12	6.1	mg/Kg	1	*	6010B	Total/NA
Lead	14		0.29	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	22000		5.9	2.9	mg/Kg	1	*	6010B	Total/NA
Manganese	300		0.59	0.085	mg/Kg	1	*	6010B	Total/NA
Nickel	37		0.59	0.17	mg/Kg	1	*	6010B	Total/NA
Potassium	4000		29	10	mg/Kg	1	*	6010B	Total/NA
Selenium	0.88		0.59	0.35	mg/Kg	1	*	6010B	Total/NA
Silver	2.6		0.29	0.076	mg/Kg	1	*	6010B	Total/NA
Sodium	770		59	8.7	mg/Kg	1	*	6010B	Total/NA
Thallium	1.1		0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Vanadium	25		0.29	0.069	mg/Kg	1	*	6010B	Total/NA
Zinc	49		1.2	0.52	mg/Kg	1	*	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.076	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.24	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.23		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.020	0.0066	mg/Kg	1	*	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.046	J	0.082	0.0075	mg/Kg	1	*	8270D	Total/NA
Acenaphthene	0.0082	J	0.040	0.0073	mg/Kg	1	*	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B42 (0-7) (Continued)

Lab Sample ID: 500-173293-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.16		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0080	J	0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.040		0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.71	J B	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.1	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.60	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	800		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.31	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.26	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.073	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.21	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.046		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.016	J	0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00062	J	0.0037	0.00060	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.048	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.025	J	0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.87	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.2		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.74		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	22		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B43 (0-7) (Continued)

Lab Sample ID: 500-173293-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	68000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700		30	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7		0.30	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	1900		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.92		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.067	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.064	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.30	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.069		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.035	J	0.075	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.014	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.021	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.15		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.055		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.084		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.052		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.090		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.059		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.69	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	20		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	75000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B44 (0-4) (Continued)

Lab Sample ID: 500-173293-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	30	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	29000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.68		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.053	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.21	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.039		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.0081	J	0.070	0.0064	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0057	J	0.034	0.0046	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0066	J	0.034	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0061	J	0.034	0.0049	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.098		0.034	0.0048	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.022	J	0.034	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.23		0.034	0.0064	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.31		0.034	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.12		0.034	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.14		0.034	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.18		0.034	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.10		0.034	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.034	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.048		0.034	0.0090	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.013	J	0.034	0.0067	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.034	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.59	J B	1.1	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.7		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	12		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.26		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	200000		110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	5.0	B	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (0-4) (Continued)

Lab Sample ID: 500-173293-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	7.3		0.26	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	5.5	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	4300	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	110000		53	26	mg/Kg	10	☼	6010B	Total/NA
Manganese	200		0.53	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		26	9.3	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.55		0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	0.64		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	420		53	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	6.1		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	30		1.1	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.31	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.085	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.24	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0085	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.014	J	0.016	0.0068	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.082		0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0078	J	0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.010	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.043		0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.039	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.76	J B	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.74		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	21		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	68000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	30	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3500		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (4-8) (Continued)

Lab Sample ID: 500-173293-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	2.5		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.92		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.056	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.17	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.031	J	0.075	0.0068	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.010	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.016	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.028	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.033	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.75	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.2		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.72		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	19		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	68000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	34	B	0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.79		0.55	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.55	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (0-4) (Continued)

Lab Sample ID: 500-173293-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.059	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.20	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.71		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.017	0.0058	mg/Kg	1	*	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.079	J	0.082	0.0074	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.15		0.040	0.0056	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.038	J	0.040	0.0080	mg/Kg	1	*	8270D	Total/NA
Antimony	0.72	J B	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	10		0.59	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	42		0.59	0.067	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.72		0.23	0.055	mg/Kg	1	*	6010B	Total/NA
Boron	21		2.9	0.27	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.094	J B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA
Calcium	62000		120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	19	B	0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	*	6010B	Total/NA
Copper	31	B	0.59	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	22000	B	12	6.1	mg/Kg	1	*	6010B	Total/NA
Lead	16		0.29	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	*	6010B	Total/NA
Manganese	330		0.59	0.085	mg/Kg	1	*	6010B	Total/NA
Nickel	37		0.59	0.17	mg/Kg	1	*	6010B	Total/NA
Potassium	3700		29	10	mg/Kg	1	*	6010B	Total/NA
Selenium	0.73		0.59	0.35	mg/Kg	1	*	6010B	Total/NA
Silver	2.7		0.29	0.076	mg/Kg	1	*	6010B	Total/NA
Sodium	480		59	8.7	mg/Kg	1	*	6010B	Total/NA
Thallium	1.0		0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Vanadium	23		0.29	0.069	mg/Kg	1	*	6010B	Total/NA
Zinc	50		1.2	0.52	mg/Kg	1	*	6010B	Total/NA
Barium	0.72		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.044	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0068	mg/Kg	1	*	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.034		0.019	0.0081	mg/Kg	1	*	8260B	Total/NA
2-Methylnaphthalene	0.030	J	0.078	0.0071	mg/Kg	1	*	8270D	Total/NA
Acenaphthene	0.022	J	0.038	0.0069	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.14		0.038	0.0054	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.023	J	0.038	0.0077	mg/Kg	1	*	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B48 (0-6) (Continued)

Lab Sample ID: 500-173293-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.037	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.81	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.2		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	66000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	30	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	27000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.1		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	570		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.83		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.044		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.013	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.020	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.014	J	0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.016	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.033	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.19		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.22		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.091		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.12		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.096		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.099		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.10		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.041		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.040		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B49 (0-5) (Continued)

Lab Sample ID: 500-173293-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.76	J B	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.9		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	18		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.32		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	170000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	6.8	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.8		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	6000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	94000		55	27	mg/Kg	10	☼	6010B	Total/NA
Manganese	180		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.9		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Silver	0.95		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	550		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	8.7		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	27		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.031	B	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.29	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.019		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173293-4	2615V2-01-B38 (0-5)	Solid	11/11/19 11:35	11/11/19 16:00	
500-173293-5	2615V2-01-B38 (5-10)	Solid	11/11/19 11:40	11/11/19 16:00	
500-173293-6	2615V2-01-B38 (10-15)	Solid	11/11/19 11:45	11/11/19 16:00	
500-173293-7	2615V2-01-B42 (0-7)	Solid	11/11/19 12:30	11/11/19 16:00	
500-173293-8	2615V2-01-B43 (0-7)	Solid	11/11/19 12:40	11/11/19 16:00	
500-173293-9	2615V2-01-B44 (0-4)	Solid	11/11/19 12:55	11/11/19 16:00	
500-173293-10	2615V2-01-B45 (0-4)	Solid	11/11/19 13:10	11/11/19 16:00	
500-173293-11	2615V2-01-B45 (4-8)	Solid	11/11/19 13:15	11/11/19 16:00	
500-173293-12	2615V2-01-B46 (0-4)	Solid	11/11/19 14:00	11/11/19 16:00	
500-173293-13	2615V2-01-B46 (4-8)	Solid	11/11/19 14:05	11/11/19 16:00	
500-173293-14	2615V2-01-B48 (0-6)	Solid	11/11/19 14:30	11/11/19 16:00	
500-173293-15	2615V2-01-B49 (0-5)	Solid	11/11/19 14:45	11/11/19 16:00	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 78.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.058		0.022	0.0097	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Carbon tetrachloride	<0.0022		0.0022	0.00065	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Chlorobenzene	<0.0022		0.0022	0.00082	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Chloroethane	<0.0056 *		0.0056	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Chloromethane	<0.0056		0.0056	0.0022	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Dibromochloromethane	<0.0022		0.0022	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,2-Dichloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,1-Dichloroethene	<0.0022		0.0022	0.00077	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,2-Dichloropropane	<0.0022		0.0022	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
2-Hexanone	<0.0056		0.0056	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Tetrachloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00099	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00096	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Vinyl acetate	<0.0056		0.0056	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Vinyl chloride	<0.0022		0.0022	0.00099	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1
Xylenes, Total	0.0011 J		0.0045	0.00071	mg/Kg	☼	11/11/19 16:30	11/20/19 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 131	11/11/19 16:30	11/20/19 12:44	1
Dibromofluoromethane	86		75 - 126	11/11/19 16:30	11/20/19 12:44	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/11/19 16:30	11/20/19 12:44	1
Toluene-d8 (Surr)	98		75 - 124	11/11/19 16:30	11/20/19 12:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.094	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 78.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2-Methylnaphthalene	<0.085		0.085	0.0078	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,4-Dinitrophenol	<0.85	*	0.85	0.75	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Acenaphthene	<0.042		0.042	0.0076	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Phenanthrene	0.085		0.042	0.0059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Anthracene	0.0075	J	0.042	0.0071	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Fluoranthene	0.019	J	0.042	0.0078	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Pyrene	0.060		0.042	0.0084	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Benzof[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 78.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.042	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0082	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	11/19/19 16:34	11/23/19 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	58		31 - 166				11/19/19 16:34	11/23/19 18:00	1
Phenol-d5	66		30 - 153				11/19/19 16:34	11/23/19 18:00	1
Nitrobenzene-d5	62		37 - 147				11/19/19 16:34	11/23/19 18:00	1
2-Fluorobiphenyl	76		43 - 145				11/19/19 16:34	11/23/19 18:00	1
2,4,6-Tribromophenol	54		31 - 143				11/19/19 16:34	11/23/19 18:00	1
Terphenyl-d14	114		42 - 157				11/19/19 16:34	11/23/19 18:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	J B	1.3	0.25	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Arsenic	5.0		0.64	0.22	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Barium	31		0.64	0.072	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Beryllium	0.61		0.25	0.059	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Boron	17		3.2	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Cadmium	0.031	J B	0.13	0.023	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Calcium	37000		13	2.2	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Chromium	15	B	0.64	0.31	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Cobalt	8.8		0.32	0.083	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Copper	25	B	0.64	0.18	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Iron	16000	B	13	6.6	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Lead	11		0.32	0.15	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Magnesium	23000		6.4	3.2	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Manganese	210		0.64	0.092	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Nickel	29		0.64	0.18	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Potassium	2800		32	11	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Selenium	0.52	J	0.64	0.37	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Silver	2.3		0.32	0.082	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Sodium	1500		64	9.4	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Thallium	0.78		0.64	0.32	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Vanadium	17		0.32	0.075	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1
Zinc	37		1.3	0.56	mg/Kg	☼	11/21/19 17:21	11/23/19 00:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.43	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:08	1
Boron	0.10	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:08	1

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 78.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0022	J	0.0050	0.0020	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/21/19 11:26	1
Cobalt	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Iron	<0.40		0.40	0.20	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Manganese	0.88		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Nickel	0.034	B	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Silver	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:08	1
Zinc	0.21	J B	0.50	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:08	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L	-	11/19/19 15:48	11/20/19 14:09	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/19/19 15:52	11/20/19 15:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/19/19 15:52	11/20/19 15:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/19/19 10:10	11/20/19 09:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0068	mg/Kg	☼	11/18/19 14:20	11/19/19 07:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		11/15/19 18:12	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Date Collected: 11/11/19 11:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Chloroethane	<0.0037 *		0.0037	0.0011	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	11/11/19 16:30	11/20/19 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	11/11/19 16:30	11/20/19 13:10	1
Dibromofluoromethane	96		75 - 126	11/11/19 16:30	11/20/19 13:10	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/11/19 16:30	11/20/19 13:10	1
Toluene-d8 (Surr)	98		75 - 124	11/11/19 16:30	11/20/19 13:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Date Collected: 11/11/19 11:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2-Methylnaphthalene	0.027	J	0.081	0.0073	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,4-Dinitrophenol	<0.81	*	0.81	0.70	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Phenanthrene	0.079		0.040	0.0056	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Pyrene	0.013	J	0.040	0.0079	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Date Collected: 11/11/19 11:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.025	J	0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/19/19 16:34	11/23/19 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	62		31 - 166				11/19/19 16:34	11/23/19 14:47	1
Phenol-d5	66		30 - 153				11/19/19 16:34	11/23/19 14:47	1
Nitrobenzene-d5	66		37 - 147				11/19/19 16:34	11/23/19 14:47	1
2-Fluorobiphenyl	77		43 - 145				11/19/19 16:34	11/23/19 14:47	1
2,4,6-Tribromophenol	59		31 - 143				11/19/19 16:34	11/23/19 14:47	1
Terphenyl-d14	100		42 - 157				11/19/19 16:34	11/23/19 14:47	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J B	1.1	0.22	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Arsenic	7.2		0.56	0.19	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Barium	45		0.56	0.064	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Beryllium	0.68		0.22	0.052	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Boron	20		2.8	0.26	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Cadmium	0.12	B	0.11	0.020	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Calcium	60000		110	19	mg/Kg	☼	11/21/19 17:21	11/25/19 11:45	10
Chromium	18	B	0.56	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Cobalt	13		0.28	0.073	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Copper	28	B	0.56	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Iron	18000	B	11	5.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Lead	14		0.28	0.13	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Magnesium	25000		5.6	2.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Manganese	350		0.56	0.081	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Nickel	33		0.56	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Potassium	3700		28	9.9	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Selenium	0.70		0.56	0.33	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Silver	2.6		0.28	0.072	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Sodium	410		56	8.3	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Thallium	0.94		0.56	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Vanadium	22		0.28	0.066	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1
Zinc	46		1.1	0.49	mg/Kg	☼	11/21/19 17:21	11/23/19 01:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.97		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:12	1
Boron	0.072	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Date Collected: 11/11/19 11:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0021	J	0.0050	0.0020	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/21/19 11:39	1
Cobalt	0.027		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Iron	<0.40		0.40	0.20	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Manganese	2.5		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Nickel	0.070	B	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Silver	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:12	1
Zinc	0.15	J B	0.50	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:12	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.057		0.025	0.010	mg/L	-	11/19/19 15:48	11/20/19 14:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/19/19 15:52	11/20/19 15:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/19/19 15:52	11/20/19 15:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/19/19 10:10	11/20/19 09:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0064	mg/Kg	☼	11/18/19 14:20	11/19/19 07:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU	-		11/15/19 18:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.022		0.022	0.0095	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Bromomethane	<0.0054		0.0054	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Chloroethane	<0.0054 *		0.0054	0.0016	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,3-Dichloropropane, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Vinyl acetate	<0.0054		0.0054	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1
Xylenes, Total	<0.0043		0.0043	0.00070	mg/Kg	☼	11/11/19 16:30	11/20/19 13:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	11/11/19 16:30	11/20/19 13:35	1
Dibromofluoromethane	96		75 - 126	11/11/19 16:30	11/20/19 13:35	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/11/19 16:30	11/20/19 13:35	1
Toluene-d8 (Surr)	99		75 - 124	11/11/19 16:30	11/20/19 13:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2-Methylnaphthalene	0.048	J	0.083	0.0075	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Fluorene	0.0065	J	0.041	0.0058	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Phenanthrene	0.13		0.041	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Pyrene	0.034	J	0.041	0.0082	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.041	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/19/19 16:34	11/22/19 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166	11/19/19 16:34	11/22/19 17:20	1
Phenol-d5	71		30 - 153	11/19/19 16:34	11/22/19 17:20	1
Nitrobenzene-d5	64		37 - 147	11/19/19 16:34	11/22/19 17:20	1
2-Fluorobiphenyl	111		43 - 145	11/19/19 16:34	11/22/19 17:20	1
2,4,6-Tribromophenol	44		31 - 143	11/19/19 16:34	11/22/19 17:20	1
Terphenyl-d14	133		42 - 157	11/19/19 16:34	11/22/19 17:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.85	J B	1.2	0.23	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Arsenic	7.6		0.59	0.20	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Barium	41		0.59	0.067	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Beryllium	0.80		0.24	0.055	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Boron	23		2.9	0.27	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Cadmium	0.090	J B	0.12	0.021	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Calcium	55000		120	20	mg/Kg	☼	11/21/19 17:21	11/25/19 11:49	10
Chromium	19	B	0.59	0.29	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Cobalt	14		0.29	0.077	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Copper	31	B	0.59	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Iron	24000	B	12	6.1	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Lead	14		0.29	0.14	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Manganese	300		0.59	0.085	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Nickel	37		0.59	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Potassium	4000		29	10	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Selenium	0.88		0.59	0.35	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Silver	2.6		0.29	0.076	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Sodium	770		59	8.7	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Vanadium	25		0.29	0.069	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1
Zinc	49		1.2	0.52	mg/Kg	☼	11/21/19 17:21	11/23/19 01:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.76		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:17	1
Boron	0.089	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 19:17	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/21/19 11:43	1
Cobalt	0.026		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:17	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:52	11/20/19 19:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 19:17	1
Manganese	2.1		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:17	1
Nickel	0.076	B	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:17	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 19:17	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:17	1
Zinc	0.24	J B	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 19:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.23		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 14:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 15:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 15:21	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 09:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.020	0.0066	mg/Kg	☼	11/18/19 14:20	11/19/19 07:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/15/19 18:19	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 81.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Chloroethane	<0.0042 *		0.0042	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/11/19 16:30	11/20/19 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	11/11/19 16:30	11/20/19 14:01	1
Dibromofluoromethane	98		75 - 126	11/11/19 16:30	11/20/19 14:01	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/11/19 16:30	11/20/19 14:01	1
Toluene-d8 (Surr)	99		75 - 124	11/11/19 16:30	11/20/19 14:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 81.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2-Methylnaphthalene	0.046	J	0.082	0.0075	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,4-Dinitrophenol	<0.82	*	0.82	0.71	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Acenaphthene	0.0082	J	0.040	0.0073	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Phenanthrene	0.16		0.040	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Fluoranthene	0.0080	J	0.040	0.0075	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Pyrene	0.040		0.040	0.0081	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 81.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/19/19 16:34	11/22/19 17:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	54		31 - 166				11/19/19 16:34	11/22/19 17:45	1
Phenol-d5	62		30 - 153				11/19/19 16:34	11/22/19 17:45	1
Nitrobenzene-d5	74		37 - 147				11/19/19 16:34	11/22/19 17:45	1
2-Fluorobiphenyl	79		43 - 145				11/19/19 16:34	11/22/19 17:45	1
2,4,6-Tribromophenol	57		31 - 143				11/19/19 16:34	11/22/19 17:45	1
Terphenyl-d14	144		42 - 157				11/19/19 16:34	11/22/19 17:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.71	J B	1.2	0.24	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Arsenic	7.5		0.61	0.21	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Barium	34		0.61	0.070	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Beryllium	0.66		0.24	0.057	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Boron	18		3.1	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Cadmium	0.14	B	0.12	0.022	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Calcium	56000		120	21	mg/Kg	☼	11/21/19 17:21	11/25/19 11:53	10
Chromium	17	B	0.61	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Cobalt	13		0.31	0.080	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Copper	31	B	0.61	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Iron	17000	B	12	6.3	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Lead	14		0.31	0.14	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Magnesium	22000		6.1	3.0	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Manganese	320		0.61	0.088	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Nickel	33		0.61	0.18	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Potassium	3200		31	11	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Selenium	0.60	J	0.61	0.36	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Silver	2.3		0.31	0.079	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Sodium	800		61	9.0	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Thallium	1.0		0.61	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Vanadium	20		0.31	0.072	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1
Zinc	48		1.2	0.54	mg/Kg	☼	11/21/19 17:21	11/23/19 01:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:21	1
Boron	0.11	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 81.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0026	J	0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 19:21	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/21/19 11:47	1
Cobalt	0.028		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:21	1
Iron	0.26	J	0.40	0.20	mg/L		11/19/19 15:52	11/20/19 19:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 19:21	1
Manganese	2.8		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:21	1
Nickel	0.073	B	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:21	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 19:21	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:21	1
Zinc	0.21	J B	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 19:21	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.046		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 14:21	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 15:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 15:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.019	0.0065	mg/Kg	☼	11/18/19 14:20	11/19/19 08:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			11/15/19 18:22	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Date Collected: 11/11/19 12:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.016	J	0.019	0.0081	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Chloroethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1
Xylenes, Total	0.00062	J	0.0037	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		75 - 131	11/11/19 16:30	11/20/19 14:52	1
Dibromofluoromethane	94		75 - 126	11/11/19 16:30	11/20/19 14:52	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/11/19 16:30	11/20/19 14:52	1
Toluene-d8 (Surr)	104		75 - 124	11/11/19 16:30	11/20/19 14:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Date Collected: 11/11/19 12:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2-Methylnaphthalene	0.048	J	0.082	0.0075	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Phenanthrene	0.12		0.040	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Pyrene	0.025	J	0.040	0.0081	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Date Collected: 11/11/19 12:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/19/19 16:34	11/22/19 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	42		31 - 166	11/19/19 16:34	11/22/19 18:09	1
Phenol-d5	47		30 - 153	11/19/19 16:34	11/22/19 18:09	1
Nitrobenzene-d5	53		37 - 147	11/19/19 16:34	11/22/19 18:09	1
2-Fluorobiphenyl	73		43 - 145	11/19/19 16:34	11/22/19 18:09	1
2,4,6-Tribromophenol	54		31 - 143	11/19/19 16:34	11/22/19 18:09	1
Terphenyl-d14	129		42 - 157	11/19/19 16:34	11/22/19 18:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.87	J B	1.2	0.23	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Arsenic	8.2		0.59	0.20	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Barium	39		0.59	0.068	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Beryllium	0.74		0.24	0.055	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Boron	22		3.0	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Cadmium	0.15	B	0.12	0.021	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Calcium	68000		120	20	mg/Kg	☼	11/21/19 17:21	11/25/19 11:57	10
Chromium	18	B	0.59	0.29	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Cobalt	14		0.30	0.078	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Copper	31	B	0.59	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Iron	20000	B	12	6.2	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Lead	16		0.30	0.14	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Magnesium	24000		5.9	2.9	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Manganese	340		0.59	0.086	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Nickel	36		0.59	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Potassium	3700		30	10	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Selenium	0.83		0.59	0.35	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Silver	2.7		0.30	0.076	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Sodium	1900		59	8.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Thallium	0.92		0.59	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Vanadium	23		0.30	0.070	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1
Zinc	57		1.2	0.52	mg/Kg	☼	11/21/19 17:21	11/23/19 01:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:25	1
Boron	0.067	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:25	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Date Collected: 11/11/19 12:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/21/19 11:52	1
Cobalt	0.016	J	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Iron	<0.40		0.40	0.20	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Manganese	1.9		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Nickel	0.064	B	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Silver	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:25	1
Zinc	0.30	J B	0.50	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:25	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.069		0.025	0.010	mg/L	-	11/19/19 15:48	11/20/19 14:26	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/19/19 15:52	11/20/19 15:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/19/19 15:52	11/20/19 15:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/19/19 10:10	11/20/19 09:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.019	0.0063	mg/Kg	☼	11/18/19 14:20	11/19/19 08:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		11/15/19 18:26	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Date Collected: 11/11/19 12:55

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.027		0.027	0.012	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Benzene	<0.0027		0.0027	0.00069	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Bromodichloromethane	<0.0027		0.0027	0.00055	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Bromoform	<0.0027		0.0027	0.00079	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Bromomethane	<0.0068		0.0068	0.0026	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
2-Butanone (MEK)	<0.0068		0.0068	0.0030	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Carbon disulfide	<0.0068		0.0068	0.0014	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Carbon tetrachloride	<0.0027		0.0027	0.00079	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Chlorobenzene	<0.0027		0.0027	0.0010	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Chloroethane	<0.0068 *		0.0068	0.0020	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Chloroform	<0.0027		0.0027	0.00094	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Chloromethane	<0.0068		0.0068	0.0027	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
cis-1,2-Dichloroethene	<0.0027		0.0027	0.00076	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
cis-1,3-Dichloropropene	<0.0027		0.0027	0.00082	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Dibromochloromethane	<0.0027		0.0027	0.00089	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,1-Dichloroethane	<0.0027		0.0027	0.00093	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,2-Dichloroethane	<0.0068		0.0068	0.0021	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,1-Dichloroethene	<0.0027		0.0027	0.00093	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,2-Dichloropropane	<0.0027		0.0027	0.00070	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,3-Dichloropropane, Total	<0.0027		0.0027	0.00095	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Ethylbenzene	<0.0027		0.0027	0.0013	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
2-Hexanone	<0.0068		0.0068	0.0021	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Methylene Chloride	<0.0068		0.0068	0.0027	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
4-Methyl-2-pentanone (MIBK)	<0.0068		0.0068	0.0020	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Methyl tert-butyl ether	<0.0027		0.0027	0.00080	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Styrene	<0.0027		0.0027	0.00082	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,1,2,2-Tetrachloroethane	<0.0027		0.0027	0.00087	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Tetrachloroethene	<0.0027		0.0027	0.00092	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Toluene	<0.0027		0.0027	0.00068	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
trans-1,2-Dichloroethene	<0.0027		0.0027	0.0012	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
trans-1,3-Dichloropropene	<0.0027		0.0027	0.00095	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,1,1-Trichloroethane	<0.0027		0.0027	0.00091	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
1,1,2-Trichloroethane	<0.0027		0.0027	0.0012	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Trichloroethene	<0.0027		0.0027	0.00092	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Vinyl acetate	<0.0068		0.0068	0.0024	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Vinyl chloride	<0.0027		0.0027	0.0012	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1
Xylenes, Total	<0.0054		0.0054	0.00087	mg/Kg	☼	11/11/19 16:30	11/21/19 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	11/11/19 16:30	11/21/19 13:18	1
Dibromofluoromethane	96		75 - 126	11/11/19 16:30	11/21/19 13:18	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/11/19 16:30	11/21/19 13:18	1
Toluene-d8 (Surr)	95		75 - 124	11/11/19 16:30	11/21/19 13:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Date Collected: 11/11/19 12:55

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2-Methylnaphthalene	0.035	J	0.075	0.0069	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Acenaphthene	0.014	J	0.037	0.0067	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Phenanthrene	0.15		0.037	0.0052	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Anthracene	0.021	J	0.037	0.0062	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Fluoranthene	0.11		0.037	0.0069	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Pyrene	0.15		0.037	0.0074	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Benzo[a]anthracene	0.055		0.037	0.0050	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Date Collected: 11/11/19 12:55

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.084		0.037	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Benzo[b]fluoranthene	0.052		0.037	0.0081	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Benzo[k]fluoranthene	0.090		0.037	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Benzo[a]pyrene	0.059		0.037	0.0072	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Benzo[g,h,i]perylene	0.020	J	0.037	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/19/19 16:34	11/23/19 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	51		31 - 166				11/19/19 16:34	11/23/19 18:24	1
Phenol-d5	52		30 - 153				11/19/19 16:34	11/23/19 18:24	1
Nitrobenzene-d5	46		37 - 147				11/19/19 16:34	11/23/19 18:24	1
2-Fluorobiphenyl	65		43 - 145				11/19/19 16:34	11/23/19 18:24	1
2,4,6-Tribromophenol	63		31 - 143				11/19/19 16:34	11/23/19 18:24	1
Terphenyl-d14	96		42 - 157				11/19/19 16:34	11/23/19 18:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J B	1.1	0.22	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Arsenic	8.0		0.56	0.19	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Barium	39		0.56	0.064	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Beryllium	0.69		0.22	0.052	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Boron	20		2.8	0.26	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Cadmium	0.14	B	0.11	0.020	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Calcium	75000		110	19	mg/Kg	☼	11/21/19 17:21	11/25/19 12:01	10
Chromium	17	B	0.56	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Cobalt	13		0.28	0.073	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Copper	30	B	0.56	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Iron	18000	B	11	5.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Lead	22		0.28	0.13	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Magnesium	29000		5.6	2.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Manganese	320		0.56	0.081	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Nickel	33		0.56	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Potassium	3300		28	9.9	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Selenium	0.63		0.56	0.33	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Silver	2.3		0.28	0.072	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Sodium	640		56	8.3	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Thallium	0.68		0.56	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Vanadium	21		0.28	0.066	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1
Zinc	48		1.1	0.49	mg/Kg	☼	11/21/19 17:21	11/23/19 01:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:29	1
Boron	0.072	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Date Collected: 11/11/19 12:55

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 86.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0027	J	0.0050	0.0020	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/21/19 11:56	1
Cobalt	0.021	J	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Iron	<0.40		0.40	0.20	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Manganese	1.5		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Nickel	0.053	B	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Silver	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:29	1
Zinc	0.21	J B	0.50	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:29	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L	-	11/19/19 15:48	11/20/19 14:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/19/19 15:52	11/20/19 15:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/19/19 15:52	11/20/19 15:36	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/19/19 10:10	11/20/19 09:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.017	0.0058	mg/Kg	☼	11/18/19 14:20	11/19/19 08:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		11/15/19 18:29	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 92.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.024		0.024	0.011	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Benzene	<0.0024		0.0024	0.00062	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Bromodichloromethane	<0.0024		0.0024	0.00049	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Bromoform	<0.0024		0.0024	0.00071	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Bromomethane	<0.0060		0.0060	0.0023	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
2-Butanone (MEK)	<0.0060		0.0060	0.0027	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Carbon disulfide	<0.0060		0.0060	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Carbon tetrachloride	<0.0024		0.0024	0.00070	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Chlorobenzene	<0.0024		0.0024	0.00089	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Chloroethane	<0.0060 *		0.0060	0.0018	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Chloroform	<0.0024		0.0024	0.00084	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Chloromethane	<0.0060		0.0060	0.0024	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00068	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Dibromochloromethane	<0.0024		0.0024	0.00079	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,1-Dichloroethane	<0.0024		0.0024	0.00083	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,2-Dichloroethane	<0.0060		0.0060	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,1-Dichloroethene	<0.0024		0.0024	0.00083	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,2-Dichloropropane	<0.0024		0.0024	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,3-Dichloropropane, Total	<0.0024		0.0024	0.00085	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Ethylbenzene	<0.0024		0.0024	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
2-Hexanone	<0.0060		0.0060	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Methylene Chloride	<0.0060		0.0060	0.0024	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
4-Methyl-2-pentanone (MIBK)	<0.0060		0.0060	0.0018	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00071	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Styrene	<0.0024		0.0024	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00077	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Tetrachloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Toluene	<0.0024		0.0024	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00085	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,1,1-Trichloroethane	<0.0024		0.0024	0.00081	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Trichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Vinyl acetate	<0.0060		0.0060	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1
Xylenes, Total	<0.0048		0.0048	0.00077	mg/Kg	☼	11/11/19 16:30	11/20/19 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		75 - 131	11/11/19 16:30	11/20/19 15:44	1
Dibromofluoromethane	93		75 - 126	11/11/19 16:30	11/20/19 15:44	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/11/19 16:30	11/20/19 15:44	1
Toluene-d8 (Surr)	95		75 - 124	11/11/19 16:30	11/20/19 15:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 92.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,2'-oxybis[1-chloropropane]	<0.17	*	0.17	0.040	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2-Methylnaphthalene	0.0081	J	0.070	0.0064	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,4-Dinitrophenol	<0.70	*	0.70	0.61	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Acenaphthylene	0.0057	J	0.034	0.0046	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Acenaphthene	0.0066	J	0.034	0.0062	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Fluorene	0.0061	J	0.034	0.0049	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Phenanthrene	0.098		0.034	0.0048	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Anthracene	0.022	J	0.034	0.0058	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Fluoranthene	0.23		0.034	0.0064	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Pyrene	0.31		0.034	0.0069	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Benzo[a]anthracene	0.12		0.034	0.0047	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 92.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.14		0.034	0.0094	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Benzo[b]fluoranthene	0.18		0.034	0.0075	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Benzo[k]fluoranthene	0.10		0.034	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Benzo[a]pyrene	0.13		0.034	0.0067	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Indeno[1,2,3-cd]pyrene	0.048		0.034	0.0090	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Dibenz(a,h)anthracene	0.013	J	0.034	0.0067	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Benzo[g,h,i]perylene	0.024	J	0.034	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	11/19/19 16:34	11/23/19 18:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		31 - 166				11/19/19 16:34	11/23/19 18:48	1
Phenol-d5	71		30 - 153				11/19/19 16:34	11/23/19 18:48	1
Nitrobenzene-d5	65		37 - 147				11/19/19 16:34	11/23/19 18:48	1
2-Fluorobiphenyl	82		43 - 145				11/19/19 16:34	11/23/19 18:48	1
2,4,6-Tribromophenol	55		31 - 143				11/19/19 16:34	11/23/19 18:48	1
Terphenyl-d14	131		42 - 157				11/19/19 16:34	11/23/19 18:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J B	1.1	0.20	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Arsenic	4.7		0.53	0.18	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Barium	12		0.53	0.060	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Beryllium	0.26		0.21	0.049	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Boron	18		2.6	0.24	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Cadmium	0.16	B	0.11	0.019	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Calcium	200000		110	18	mg/Kg	☼	11/21/19 17:21	11/25/19 12:05	10
Chromium	5.0	B	0.53	0.26	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Cobalt	7.3		0.26	0.069	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Copper	5.5	B	0.53	0.15	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Iron	4300	B	11	5.5	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Lead	15		0.26	0.12	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Magnesium	110000		53	26	mg/Kg	☼	11/21/19 17:21	11/25/19 12:05	10
Manganese	200		0.53	0.076	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Nickel	11		0.53	0.15	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Potassium	1000		26	9.3	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Selenium	0.55		0.53	0.31	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Silver	0.64		0.26	0.068	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Sodium	420		53	7.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Vanadium	6.1		0.26	0.062	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1
Zinc	30		1.1	0.46	mg/Kg	☼	11/21/19 17:21	11/23/19 01:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.31	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:33	1
Boron	0.085	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 92.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/21/19 12:00	1
Cobalt	0.010	J	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Iron	<0.40		0.40	0.20	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Manganese	1.3		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Nickel	0.039	B	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Silver	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:33	1
Zinc	0.24	J B	0.50	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.22		0.025	0.010	mg/L	-	11/19/19 15:48	11/20/19 14:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/19/19 15:52	11/20/19 15:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/19/19 15:52	11/20/19 15:39	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/19/19 10:10	11/20/19 09:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0085	J	0.017	0.0058	mg/Kg	☼	11/18/19 14:20	11/19/19 08:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU	-		11/15/19 18:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014	J	0.016	0.0068	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/11/19 16:30	11/20/19 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 131	11/11/19 16:30	11/20/19 16:09	1
Dibromofluoromethane	100		75 - 126	11/11/19 16:30	11/20/19 16:09	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/11/19 16:30	11/20/19 16:09	1
Toluene-d8 (Surr)	99		75 - 124	11/11/19 16:30	11/20/19 16:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2-Methylnaphthalene	0.082		0.081	0.0074	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Phenanthrene	0.16		0.040	0.0056	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Anthracene	0.0078	J	0.040	0.0067	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Fluoranthene	0.010	J	0.040	0.0074	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Pyrene	0.043		0.040	0.0080	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.039	J	0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/19/19 16:34	11/23/19 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		31 - 166				11/19/19 16:34	11/23/19 19:12	1
Phenol-d5	76		30 - 153				11/19/19 16:34	11/23/19 19:12	1
Nitrobenzene-d5	73		37 - 147				11/19/19 16:34	11/23/19 19:12	1
2-Fluorobiphenyl	82		43 - 145				11/19/19 16:34	11/23/19 19:12	1
2,4,6-Tribromophenol	78		31 - 143				11/19/19 16:34	11/23/19 19:12	1
Terphenyl-d14	127		42 - 157				11/19/19 16:34	11/23/19 19:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J B	1.2	0.24	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Arsenic	8.1		0.61	0.21	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Barium	39		0.61	0.069	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Beryllium	0.74		0.24	0.057	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Boron	21		3.0	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Cadmium	0.17	B	0.12	0.022	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Calcium	68000		120	21	mg/Kg	☼	11/21/19 17:21	11/25/19 12:09	10
Chromium	18	B	0.61	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Cobalt	14		0.30	0.079	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Copper	30	B	0.61	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Iron	19000	B	12	6.3	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Lead	16		0.30	0.14	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Magnesium	23000		6.1	3.0	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Manganese	330		0.61	0.088	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Nickel	35		0.61	0.18	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Potassium	3500		30	11	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Selenium	0.45	J	0.61	0.36	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Silver	2.5		0.30	0.078	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Sodium	430		61	9.0	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Thallium	0.92		0.61	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Vanadium	22		0.30	0.072	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1
Zinc	54		1.2	0.53	mg/Kg	☼	11/21/19 17:21	11/23/19 01:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:46	1
Boron	0.10	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:46	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/21/19 12:04	1
Cobalt	0.017	J	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Iron	<0.40		0.40	0.20	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Manganese	1.8		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Nickel	0.056	B	0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Silver	<0.025		0.025	0.010	mg/L	-	11/19/19 15:52	11/20/19 19:46	1
Zinc	0.17	J B	0.50	0.020	mg/L	-	11/19/19 15:52	11/20/19 19:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L	-	11/19/19 15:48	11/20/19 14:39	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/19/19 15:52	11/20/19 15:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/19/19 15:52	11/20/19 15:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/19/19 10:10	11/20/19 09:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0065	mg/Kg	☼	11/18/19 14:20	11/19/19 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU	-		11/15/19 18:36	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 87.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.028		0.028	0.012	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Benzene	<0.0028		0.0028	0.00072	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Bromodichloromethane	<0.0028		0.0028	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Bromoform	<0.0028		0.0028	0.00083	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Bromomethane	<0.0071		0.0071	0.0027	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
2-Butanone (MEK)	<0.0071		0.0071	0.0031	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Carbon disulfide	<0.0071		0.0071	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Carbon tetrachloride	<0.0028		0.0028	0.00082	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Chlorobenzene	<0.0028		0.0028	0.0010	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Chloroethane	<0.0071 *		0.0071	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Chloroform	<0.0028		0.0028	0.00098	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Chloromethane	<0.0071		0.0071	0.0029	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
cis-1,2-Dichloroethene	<0.0028		0.0028	0.00079	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
cis-1,3-Dichloropropene	<0.0028		0.0028	0.00086	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Dibromochloromethane	<0.0028		0.0028	0.00093	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,1-Dichloroethane	<0.0028		0.0028	0.00097	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,2-Dichloroethane	<0.0071		0.0071	0.0022	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,1-Dichloroethene	<0.0028		0.0028	0.00098	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,2-Dichloropropane	<0.0028		0.0028	0.00073	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,3-Dichloropropane, Total	<0.0028		0.0028	0.0010	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Ethylbenzene	<0.0028		0.0028	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
2-Hexanone	<0.0071		0.0071	0.0022	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Methylene Chloride	<0.0071		0.0071	0.0028	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
4-Methyl-2-pentanone (MIBK)	<0.0071		0.0071	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Methyl tert-butyl ether	<0.0028		0.0028	0.00083	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Styrene	<0.0028		0.0028	0.00086	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,1,2,2-Tetrachloroethane	<0.0028		0.0028	0.00091	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Tetrachloroethene	<0.0028		0.0028	0.00097	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Toluene	<0.0028		0.0028	0.00072	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
trans-1,2-Dichloroethene	<0.0028		0.0028	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
trans-1,3-Dichloropropene	<0.0028		0.0028	0.0010	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,1,1-Trichloroethane	<0.0028		0.0028	0.00095	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
1,1,2-Trichloroethane	<0.0028		0.0028	0.0012	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Trichloroethene	<0.0028		0.0028	0.00096	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Vinyl acetate	<0.0071		0.0071	0.0025	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Vinyl chloride	<0.0028		0.0028	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1
Xylenes, Total	<0.0057		0.0057	0.00091	mg/Kg	☼	11/11/19 16:30	11/20/19 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 131	11/11/19 16:30	11/20/19 16:35	1
Dibromofluoromethane	94		75 - 126	11/11/19 16:30	11/20/19 16:35	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/11/19 16:30	11/20/19 16:35	1
Toluene-d8 (Surr)	101		75 - 124	11/11/19 16:30	11/20/19 16:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 87.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2-Methylnaphthalene	0.031	J	0.075	0.0068	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,4-Dinitrophenol	<0.75	*	0.75	0.65	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Phenanthrene	0.16		0.037	0.0052	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Anthracene	0.010	J	0.037	0.0062	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Fluoranthene	0.016	J	0.037	0.0069	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Pyrene	0.028	J	0.037	0.0074	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Benzof[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 87.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.033	J	0.037	0.010	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 19:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				11/19/19 16:34	11/22/19 19:45	1
Phenol-d5	79		30 - 153				11/19/19 16:34	11/22/19 19:45	1
Nitrobenzene-d5	68		37 - 147				11/19/19 16:34	11/22/19 19:45	1
2-Fluorobiphenyl	85		43 - 145				11/19/19 16:34	11/22/19 19:45	1
2,4,6-Tribromophenol	72		31 - 143				11/19/19 16:34	11/22/19 19:45	1
Terphenyl-d14	100		42 - 157				11/19/19 16:34	11/22/19 19:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.75	J B	1.1	0.22	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Arsenic	8.2		0.55	0.19	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Barium	31		0.55	0.063	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Beryllium	0.72		0.22	0.052	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Boron	19		2.8	0.26	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Cadmium	0.11	B	0.11	0.020	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Calcium	68000		110	19	mg/Kg	☼	11/21/19 17:21	11/25/19 12:21	10
Chromium	16	B	0.55	0.27	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Cobalt	13		0.28	0.073	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Copper	34	B	0.55	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Iron	18000	B	11	5.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Lead	18		0.28	0.13	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Magnesium	26000		5.5	2.7	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Manganese	330		0.55	0.080	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Nickel	34		0.55	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Potassium	3200		28	9.8	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Selenium	0.79		0.55	0.33	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Silver	2.3		0.28	0.071	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Sodium	1200		55	8.2	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Thallium	0.87		0.55	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Vanadium	19		0.28	0.065	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1
Zinc	46		1.1	0.49	mg/Kg	☼	11/21/19 17:21	11/23/19 01:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:50	1
Boron	0.072	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 87.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 19:50	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/21/19 12:09	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:50	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:52	11/20/19 19:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 19:50	1
Manganese	1.8		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:50	1
Nickel	0.059	B	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:50	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 19:50	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:50	1
Zinc	0.20	J B	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 19:50	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.71		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 14:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 15:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 15:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 09:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.017	0.0058	mg/Kg	☼	11/18/19 14:20	11/19/19 08:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/15/19 18:43	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Chloroethane	<0.0047 *		0.0047	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 131	11/11/19 16:30	11/20/19 17:00	1
Dibromofluoromethane	94		75 - 126	11/11/19 16:30	11/20/19 17:00	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/11/19 16:30	11/20/19 17:00	1
Toluene-d8 (Surr)	100		75 - 124	11/11/19 16:30	11/20/19 17:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2-Methylnaphthalene	0.079	J	0.082	0.0074	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,4-Dinitrophenol	<0.82	*	0.82	0.71	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.32	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Phenanthrene	0.15		0.040	0.0056	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Pyrene	0.038	J	0.040	0.0080	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/19/19 16:34	11/22/19 20:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	51		31 - 166				11/19/19 16:34	11/22/19 20:09	1
Phenol-d5	64		30 - 153				11/19/19 16:34	11/22/19 20:09	1
Nitrobenzene-d5	48		37 - 147				11/19/19 16:34	11/22/19 20:09	1
2-Fluorobiphenyl	77		43 - 145				11/19/19 16:34	11/22/19 20:09	1
2,4,6-Tribromophenol	56		31 - 143				11/19/19 16:34	11/22/19 20:09	1
Terphenyl-d14	133		42 - 157				11/19/19 16:34	11/22/19 20:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J B	1.2	0.23	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Arsenic	10		0.59	0.20	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Barium	42		0.59	0.067	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Beryllium	0.72		0.23	0.055	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Boron	21		2.9	0.27	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Cadmium	0.094	J B	0.12	0.021	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Calcium	62000		120	20	mg/Kg	☼	11/21/19 17:21	11/25/19 12:25	10
Chromium	19	B	0.59	0.29	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Cobalt	14		0.29	0.077	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Copper	31	B	0.59	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Iron	22000	B	12	6.1	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Lead	16		0.29	0.14	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Manganese	330		0.59	0.085	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Nickel	37		0.59	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Potassium	3700		29	10	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Selenium	0.73		0.59	0.35	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Silver	2.7		0.29	0.076	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Sodium	480		59	8.7	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Thallium	1.0		0.59	0.29	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Vanadium	23		0.29	0.069	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1
Zinc	50		1.2	0.52	mg/Kg	☼	11/21/19 17:21	11/23/19 01:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.72		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:54	1
Boron	0.083	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 19:54	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/21/19 12:13	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:54	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:52	11/20/19 19:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 19:54	1
Manganese	1.8		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:54	1
Nickel	0.044	B	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:54	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 19:54	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:54	1
Zinc	0.18	J B	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 19:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 14:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 15:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 15:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 09:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0068	mg/Kg	☼	11/18/19 14:20	11/19/19 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/15/19 18:46	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.034		0.019	0.0081	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Chloroethane	<0.0047 *		0.0047	0.0014	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	11/11/19 16:30	11/21/19 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/11/19 16:30	11/21/19 13:44	1
Dibromofluoromethane	96		75 - 126	11/11/19 16:30	11/21/19 13:44	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/11/19 16:30	11/21/19 13:44	1
Toluene-d8 (Surr)	97		75 - 124	11/11/19 16:30	11/21/19 13:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2-Methylnaphthalene	0.030	J	0.078	0.0071	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Acenaphthene	0.022	J	0.038	0.0069	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Phenanthrene	0.14		0.038	0.0054	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Pyrene	0.023	J	0.038	0.0077	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Benzof[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.037	J	0.038	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	61		31 - 166				11/19/19 16:34	11/23/19 15:59	1
Phenol-d5	66		30 - 153				11/19/19 16:34	11/23/19 15:59	1
Nitrobenzene-d5	64		37 - 147				11/19/19 16:34	11/23/19 15:59	1
2-Fluorobiphenyl	79		43 - 145				11/19/19 16:34	11/23/19 15:59	1
2,4,6-Tribromophenol	63		31 - 143				11/19/19 16:34	11/23/19 15:59	1
Terphenyl-d14	97		42 - 157				11/19/19 16:34	11/23/19 15:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.81	J B	1.2	0.23	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Arsenic	8.2		0.60	0.21	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Barium	33		0.60	0.069	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Beryllium	0.66		0.24	0.056	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Boron	19		3.0	0.28	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Cadmium	0.11	J B	0.12	0.022	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Calcium	66000		120	20	mg/Kg	☼	11/21/19 17:21	11/25/19 12:29	10
Chromium	16	B	0.60	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Cobalt	13		0.30	0.079	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Copper	30	B	0.60	0.17	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Iron	18000	B	12	6.3	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Lead	14		0.30	0.14	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Magnesium	27000		6.0	3.0	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Manganese	320		0.60	0.087	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Nickel	33		0.60	0.18	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Potassium	3100		30	11	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Selenium	1.1		0.60	0.35	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Silver	2.3		0.30	0.078	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Sodium	570		60	8.9	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Thallium	0.83		0.60	0.30	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Vanadium	20		0.30	0.071	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1
Zinc	43		1.2	0.53	mg/Kg	☼	11/21/19 17:21	11/23/19 01:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 19:58	1
Boron	0.068	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 19:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 19:58	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/21/19 12:17	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:58	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:52	11/20/19 19:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 19:58	1
Manganese	1.8		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:58	1
Nickel	0.049	B	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:58	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 19:58	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 19:58	1
Zinc	0.13	J B	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 19:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.044		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 15:00	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 15:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 15:50	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 09:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0062	mg/Kg	☼	11/18/19 14:20	11/19/19 08:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/15/19 18:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Date Collected: 11/11/19 14:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 85.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Chloroethane	<0.0044 *		0.0044	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	11/11/19 16:30	11/20/19 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131	11/11/19 16:30	11/20/19 17:51	1
Dibromofluoromethane	94		75 - 126	11/11/19 16:30	11/20/19 17:51	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/11/19 16:30	11/20/19 17:51	1
Toluene-d8 (Surr)	100		75 - 124	11/11/19 16:30	11/20/19 17:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Date Collected: 11/11/19 14:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Naphthalene	0.013	J	0.038	0.0059	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2-Methylnaphthalene	0.020	J	0.078	0.0071	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Acenaphthene	0.014	J	0.038	0.0069	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Fluorene	0.016	J	0.038	0.0054	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Phenanthrene	0.17		0.038	0.0054	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Anthracene	0.033	J	0.038	0.0064	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Fluoranthene	0.19		0.038	0.0072	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Pyrene	0.22		0.038	0.0077	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Benzo[a]anthracene	0.091		0.038	0.0052	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Date Collected: 11/11/19 14:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 85.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.12		0.038	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Benzo[b]fluoranthene	0.096		0.038	0.0083	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Benzo[k]fluoranthene	0.099		0.038	0.011	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Benzo[a]pyrene	0.10		0.038	0.0075	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Indeno[1,2,3-cd]pyrene	0.041		0.038	0.010	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Benzo[g,h,i]perylene	0.040		0.038	0.012	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/19/19 16:34	11/23/19 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166				11/19/19 16:34	11/23/19 16:23	1
Phenol-d5	61		30 - 153				11/19/19 16:34	11/23/19 16:23	1
Nitrobenzene-d5	69		37 - 147				11/19/19 16:34	11/23/19 16:23	1
2-Fluorobiphenyl	79		43 - 145				11/19/19 16:34	11/23/19 16:23	1
2,4,6-Tribromophenol	64		31 - 143				11/19/19 16:34	11/23/19 16:23	1
Terphenyl-d14	94		42 - 157				11/19/19 16:34	11/23/19 16:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J B	1.1	0.21	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Arsenic	2.9		0.55	0.19	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Barium	18		0.55	0.062	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Beryllium	0.32		0.22	0.051	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Boron	17		2.7	0.25	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Cadmium	0.19	B	0.11	0.020	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Calcium	170000		110	19	mg/Kg	☼	11/21/19 17:21	11/25/19 12:33	10
Chromium	6.8	B	0.55	0.27	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Cobalt	3.8		0.27	0.072	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Copper	11	B	0.55	0.15	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Iron	6000	B	11	5.7	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Lead	19		0.27	0.13	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Magnesium	94000		55	27	mg/Kg	☼	11/21/19 17:21	11/25/19 12:33	10
Manganese	180		0.55	0.079	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Nickel	9.9		0.55	0.16	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Potassium	1500		27	9.7	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Silver	0.95		0.27	0.070	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Sodium	550		55	8.1	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Vanadium	8.7		0.27	0.064	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1
Zinc	27		1.1	0.48	mg/Kg	☼	11/21/19 17:21	11/23/19 01:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.30	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 20:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 20:15	1
Boron	0.084	J	0.50	0.050	mg/L		11/19/19 15:52	11/20/19 20:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Date Collected: 11/11/19 14:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 85.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0022	J	0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 20:15	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/21/19 12:43	1
Cobalt	0.011	J	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 20:15	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:52	11/20/19 20:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 20:15	1
Manganese	1.1		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 20:15	1
Nickel	0.031	B	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 20:15	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 20:15	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 20:15	1
Zinc	0.29	J B	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 20:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 15:04	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 16:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 16:02	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0061	mg/Kg	☼	11/18/19 14:20	11/19/19 08:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU			11/15/19 18:53	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

GC/MS VOA

Prep Batch: 515456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	5035	
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	5035	
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	5035	
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	5035	
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	5035	
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	5035	
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	5035	
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	5035	
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	5035	
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	5035	
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	5035	
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	5035	
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	5035	
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	5035	
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	5035	

Analysis Batch: 516317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	8260B	515456
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	8260B	515456
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	8260B	515456
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	8260B	515456
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	8260B	515456
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	8260B	515456
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	8260B	515456
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	8260B	515456
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	8260B	515456
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	8260B	515456
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	8260B	515456
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	8260B	515456
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	8260B	515456
MB 500-516317/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516317/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-516317/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 516539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	8260B	515456
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	8260B	515456
MB 500-516539/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516539/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-516539/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 516260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	3541	
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	3541	
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	3541	
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

GC/MS Semi VOA (Continued)

Prep Batch: 516260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	3541	
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	3541	
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	3541	
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	3541	
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	3541	
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	3541	
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	3541	
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	3541	
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	3541	
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	3541	
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	3541	
MB 500-516260/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-516260/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-173293-2 MS	2615V2-01-B36 (4-8)	Total/NA	Solid	3541	
500-173293-2 MSD	2615V2-01-B36 (4-8)	Total/NA	Solid	3541	

Analysis Batch: 516394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-516260/1-A	Method Blank	Total/NA	Solid	8270D	516260
LCS 500-516260/2-A	Lab Control Sample	Total/NA	Solid	8270D	516260

Analysis Batch: 516810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	8270D	516260
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	8270D	516260
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	8270D	516260
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	8270D	516260
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	8270D	516260

Analysis Batch: 516982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	8270D	516260
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	8270D	516260
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	8270D	516260
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	8270D	516260
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	8270D	516260
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	8270D	516260
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	8270D	516260
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	8270D	516260
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	8270D	516260
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	8270D	516260
500-173293-2 MS	2615V2-01-B36 (4-8)	Total/NA	Solid	8270D	516260
500-173293-2 MSD	2615V2-01-B36 (4-8)	Total/NA	Solid	8270D	516260

Metals

Leach Batch: 515591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	SPLP East	Solid	1312	
500-173293-2	2615V2-01-B36 (4-8)	SPLP East	Solid	1312	
500-173293-3	2615V2-01-B37 (0-2)	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals (Continued)

Leach Batch: 515591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-4	2615V2-01-B38 (0-5)	SPLP East	Solid	1312	
500-173293-5	2615V2-01-B38 (5-10)	SPLP East	Solid	1312	
500-173293-6	2615V2-01-B38 (10-15)	SPLP East	Solid	1312	
500-173293-7	2615V2-01-B42 (0-7)	SPLP East	Solid	1312	
500-173293-8	2615V2-01-B43 (0-7)	SPLP East	Solid	1312	
500-173293-9	2615V2-01-B44 (0-4)	SPLP East	Solid	1312	
500-173293-10	2615V2-01-B45 (0-4)	SPLP East	Solid	1312	
500-173293-11	2615V2-01-B45 (4-8)	SPLP East	Solid	1312	
500-173293-12	2615V2-01-B46 (0-4)	SPLP East	Solid	1312	
500-173293-13	2615V2-01-B46 (4-8)	SPLP East	Solid	1312	
500-173293-14	2615V2-01-B48 (0-6)	SPLP East	Solid	1312	
500-173293-15	2615V2-01-B49 (0-5)	SPLP East	Solid	1312	
LB 500-515591/1-B	Method Blank	SPLP East	Solid	1312	
500-173293-15 MS	2615V2-01-B49 (0-5)	SPLP East	Solid	1312	
500-173293-15 DU	2615V2-01-B49 (0-5)	SPLP East	Solid	1312	

Leach Batch: 515595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	1311	
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	1311	
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	1311	
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	1311	
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	1311	
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	1311	
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	1311	
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	1311	
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	1311	
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	1311	
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	1311	
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	1311	
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	1311	
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	1311	
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	1311	
LB 500-515595/1-B	Method Blank	TCLP	Solid	1311	
LB 500-515595/1-C	Method Blank	TCLP	Solid	1311	
500-173293-10 MS	2615V2-01-B45 (0-4)	TCLP	Solid	1311	
500-173293-10 MSD	2615V2-01-B45 (0-4)	TCLP	Solid	1311	
500-173293-14 MS	2615V2-01-B48 (0-6)	TCLP	Solid	1311	
500-173293-10 DU	2615V2-01-B45 (0-4)	TCLP	Solid	1311	
500-173293-14 DU	2615V2-01-B48 (0-6)	TCLP	Solid	1311	

Prep Batch: 515954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	7471B	
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	7471B	
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	7471B	
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	7471B	
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	7471B	
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	7471B	
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	7471B	
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals (Continued)

Prep Batch: 515954 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	7471B	
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	7471B	
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	7471B	
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	7471B	
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	7471B	
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	7471B	
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	7471B	
MB 500-515954/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-515954/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-173293-8 MS	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	
500-173293-8 MSD	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	
500-173293-8 DU	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	

Analysis Batch: 516155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	7471B	515954
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	7471B	515954
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	7471B	515954
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	7471B	515954
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	7471B	515954
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	7471B	515954
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	7471B	515954
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	515954
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	7471B	515954
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	7471B	515954
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	7471B	515954
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	7471B	515954
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	7471B	515954
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	7471B	515954
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	7471B	515954
MB 500-515954/12-A	Method Blank	Total/NA	Solid	7471B	515954
LCS 500-515954/13-A	Lab Control Sample	Total/NA	Solid	7471B	515954
500-173293-8 MS	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	515954
500-173293-8 MSD	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	515954
500-173293-8 DU	2615V2-01-B43 (0-7)	Total/NA	Solid	7471B	515954

Prep Batch: 516163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	7470A	515595
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	7470A	515595
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	7470A	515595
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	7470A	515595
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	7470A	515595
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	7470A	515595
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	7470A	515595
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	7470A	515595
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	7470A	515595
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	515595
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	7470A	515595
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	7470A	515595
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	7470A	515595

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals (Continued)

Prep Batch: 516163 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	7470A	515595
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	7470A	515595
LB 500-515595/1-B	Method Blank	TCLP	Solid	7470A	515595
MB 500-516163/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-516163/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-173293-10 MS	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	515595
500-173293-10 MSD	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	515595
500-173293-10 DU	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	515595

Prep Batch: 516246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	SPLP East	Solid	3010A	515591
500-173293-2	2615V2-01-B36 (4-8)	SPLP East	Solid	3010A	515591
500-173293-3	2615V2-01-B37 (0-2)	SPLP East	Solid	3010A	515591
500-173293-4	2615V2-01-B38 (0-5)	SPLP East	Solid	3010A	515591
500-173293-5	2615V2-01-B38 (5-10)	SPLP East	Solid	3010A	515591
500-173293-6	2615V2-01-B38 (10-15)	SPLP East	Solid	3010A	515591
500-173293-7	2615V2-01-B42 (0-7)	SPLP East	Solid	3010A	515591
500-173293-8	2615V2-01-B43 (0-7)	SPLP East	Solid	3010A	515591
500-173293-9	2615V2-01-B44 (0-4)	SPLP East	Solid	3010A	515591
500-173293-10	2615V2-01-B45 (0-4)	SPLP East	Solid	3010A	515591
500-173293-11	2615V2-01-B45 (4-8)	SPLP East	Solid	3010A	515591
500-173293-12	2615V2-01-B46 (0-4)	SPLP East	Solid	3010A	515591
500-173293-13	2615V2-01-B46 (4-8)	SPLP East	Solid	3010A	515591
500-173293-14	2615V2-01-B48 (0-6)	SPLP East	Solid	3010A	515591
500-173293-15	2615V2-01-B49 (0-5)	SPLP East	Solid	3010A	515591
LB 500-515591/1-B	Method Blank	SPLP East	Solid	3010A	515591
LCS 500-516246/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173293-15 MS	2615V2-01-B49 (0-5)	SPLP East	Solid	3010A	515591
500-173293-15 DU	2615V2-01-B49 (0-5)	SPLP East	Solid	3010A	515591

Prep Batch: 516249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	3010A	515595
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	3010A	515595
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	3010A	515595
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	3010A	515595
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	3010A	515595
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	3010A	515595
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	3010A	515595
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	3010A	515595
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	3010A	515595
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	3010A	515595
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	3010A	515595
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	3010A	515595
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	3010A	515595
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	3010A	515595
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	3010A	515595
LB 500-515595/1-C	Method Blank	TCLP	Solid	3010A	515595
LCS 500-516249/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173293-14 MS	2615V2-01-B48 (0-6)	TCLP	Solid	3010A	515595

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals (Continued)

Prep Batch: 516249 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-14 DU	2615V2-01-B48 (0-6)	TCLP	Solid	3010A	515595

Analysis Batch: 516412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	7470A	516163
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	7470A	516163
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	7470A	516163
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	7470A	516163
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	7470A	516163
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	7470A	516163
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	7470A	516163
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	7470A	516163
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	7470A	516163
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	516163
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	7470A	516163
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	7470A	516163
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	7470A	516163
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	7470A	516163
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	7470A	516163
LB 500-515595/1-B	Method Blank	TCLP	Solid	7470A	516163
MB 500-516163/12-A	Method Blank	Total/NA	Solid	7470A	516163
LCS 500-516163/13-A	Lab Control Sample	Total/NA	Solid	7470A	516163
500-173293-10 MS	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	516163
500-173293-10 MSD	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	516163
500-173293-10 DU	2615V2-01-B45 (0-4)	TCLP	Solid	7470A	516163

Analysis Batch: 516527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	6010B	516249
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	6010B	516249
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	6010B	516249
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	6010B	516249
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	6010B	516249
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	6010B	516249
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	6010B	516249
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	6010B	516249
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	6010B	516249
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	6010B	516249
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	6010B	516249
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	6010B	516249
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	6010B	516249
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	6010B	516249
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	6010B	516249
LB 500-515595/1-C	Method Blank	TCLP	Solid	6010B	516249
LCS 500-516249/2-A	Lab Control Sample	Total/NA	Solid	6010B	516249
500-173293-14 MS	2615V2-01-B48 (0-6)	TCLP	Solid	6010B	516249
500-173293-14 DU	2615V2-01-B48 (0-6)	TCLP	Solid	6010B	516249

Analysis Batch: 516528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	SPLP East	Solid	6010B	516246

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals (Continued)

Analysis Batch: 516528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-2	2615V2-01-B36 (4-8)	SPLP East	Solid	6010B	516246
500-173293-3	2615V2-01-B37 (0-2)	SPLP East	Solid	6010B	516246
500-173293-4	2615V2-01-B38 (0-5)	SPLP East	Solid	6010B	516246
500-173293-5	2615V2-01-B38 (5-10)	SPLP East	Solid	6010B	516246
500-173293-6	2615V2-01-B38 (10-15)	SPLP East	Solid	6010B	516246
500-173293-7	2615V2-01-B42 (0-7)	SPLP East	Solid	6010B	516246
500-173293-8	2615V2-01-B43 (0-7)	SPLP East	Solid	6010B	516246
500-173293-9	2615V2-01-B44 (0-4)	SPLP East	Solid	6010B	516246
500-173293-10	2615V2-01-B45 (0-4)	SPLP East	Solid	6010B	516246
500-173293-11	2615V2-01-B45 (4-8)	SPLP East	Solid	6010B	516246
500-173293-12	2615V2-01-B46 (0-4)	SPLP East	Solid	6010B	516246
500-173293-13	2615V2-01-B46 (4-8)	SPLP East	Solid	6010B	516246
500-173293-14	2615V2-01-B48 (0-6)	SPLP East	Solid	6010B	516246
500-173293-15	2615V2-01-B49 (0-5)	SPLP East	Solid	6010B	516246
LB 500-515591/1-B	Method Blank	SPLP East	Solid	6010B	516246
LCS 500-516246/2-A	Lab Control Sample	Total/NA	Solid	6010B	516246
500-173293-15 MS	2615V2-01-B49 (0-5)	SPLP East	Solid	6010B	516246
500-173293-15 DU	2615V2-01-B49 (0-5)	SPLP East	Solid	6010B	516246

Analysis Batch: 516578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	6020A	516249
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	6020A	516249
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	6020A	516249
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	6020A	516249
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	6020A	516249
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	6020A	516249
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	6020A	516249
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	6020A	516249
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	6020A	516249
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	6020A	516249
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	6020A	516249
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	6020A	516249
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	6020A	516249
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	6020A	516249
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	6020A	516249
LB 500-515595/1-C	Method Blank	TCLP	Solid	6020A	516249
LCS 500-516249/2-A	Lab Control Sample	Total/NA	Solid	6020A	516249
500-173293-14 MS	2615V2-01-B48 (0-6)	TCLP	Solid	6020A	516249
500-173293-14 DU	2615V2-01-B48 (0-6)	TCLP	Solid	6020A	516249

Analysis Batch: 516671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	TCLP	Solid	6010B	516249
500-173293-2	2615V2-01-B36 (4-8)	TCLP	Solid	6010B	516249
500-173293-3	2615V2-01-B37 (0-2)	TCLP	Solid	6010B	516249
500-173293-4	2615V2-01-B38 (0-5)	TCLP	Solid	6010B	516249
500-173293-5	2615V2-01-B38 (5-10)	TCLP	Solid	6010B	516249
500-173293-6	2615V2-01-B38 (10-15)	TCLP	Solid	6010B	516249
500-173293-7	2615V2-01-B42 (0-7)	TCLP	Solid	6010B	516249
500-173293-8	2615V2-01-B43 (0-7)	TCLP	Solid	6010B	516249

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals (Continued)

Analysis Batch: 516671 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-9	2615V2-01-B44 (0-4)	TCLP	Solid	6010B	516249
500-173293-10	2615V2-01-B45 (0-4)	TCLP	Solid	6010B	516249
500-173293-11	2615V2-01-B45 (4-8)	TCLP	Solid	6010B	516249
500-173293-12	2615V2-01-B46 (0-4)	TCLP	Solid	6010B	516249
500-173293-13	2615V2-01-B46 (4-8)	TCLP	Solid	6010B	516249
500-173293-14	2615V2-01-B48 (0-6)	TCLP	Solid	6010B	516249
500-173293-15	2615V2-01-B49 (0-5)	TCLP	Solid	6010B	516249
500-173293-14 MS	2615V2-01-B48 (0-6)	TCLP	Solid	6010B	516249
500-173293-14 DU	2615V2-01-B48 (0-6)	TCLP	Solid	6010B	516249

Prep Batch: 516708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	3050B	
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	3050B	
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	3050B	
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	3050B	
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	3050B	
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	3050B	
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	3050B	
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	3050B	
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	3050B	
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	3050B	
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	3050B	
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	3050B	
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	3050B	
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	3050B	
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	3050B	
MB 500-516708/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-516708/4-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 517104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	6010B	516708
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	6010B	516708
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	6010B	516708
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	6010B	516708
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	6010B	516708
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	6010B	516708
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	6010B	516708
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	6010B	516708
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	6010B	516708
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	6010B	516708
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	6010B	516708
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	6010B	516708
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	6010B	516708
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	6010B	516708
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	6010B	516708
MB 500-516708/1-A	Method Blank	Total/NA	Solid	6010B	516708
LCS 500-516708/4-A	Lab Control Sample	Total/NA	Solid	6010B	516708

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Metals

Analysis Batch: 517235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	6010B	516708
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	6010B	516708
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	6010B	516708
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	6010B	516708
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	6010B	516708
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	6010B	516708
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	6010B	516708
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	6010B	516708
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	6010B	516708
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	6010B	516708
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	6010B	516708
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	6010B	516708
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	6010B	516708

General Chemistry

Analysis Batch: 515358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	Moisture	
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	Moisture	
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	Moisture	
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	Moisture	
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	Moisture	
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	Moisture	
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	Moisture	
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	Moisture	
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	Moisture	
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	Moisture	
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	Moisture	
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	Moisture	
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	Moisture	
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	Moisture	
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	Moisture	
500-173293-3 DU	2615V2-01-B37 (0-2)	Total/NA	Solid	Moisture	

Analysis Batch: 515575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-1	2615V2-01-B36 (0-4)	Total/NA	Solid	9045D	
500-173293-2	2615V2-01-B36 (4-8)	Total/NA	Solid	9045D	
500-173293-3	2615V2-01-B37 (0-2)	Total/NA	Solid	9045D	
500-173293-4	2615V2-01-B38 (0-5)	Total/NA	Solid	9045D	
500-173293-5	2615V2-01-B38 (5-10)	Total/NA	Solid	9045D	
500-173293-6	2615V2-01-B38 (10-15)	Total/NA	Solid	9045D	
500-173293-7	2615V2-01-B42 (0-7)	Total/NA	Solid	9045D	
500-173293-8	2615V2-01-B43 (0-7)	Total/NA	Solid	9045D	
500-173293-9	2615V2-01-B44 (0-4)	Total/NA	Solid	9045D	
500-173293-10	2615V2-01-B45 (0-4)	Total/NA	Solid	9045D	
500-173293-11	2615V2-01-B45 (4-8)	Total/NA	Solid	9045D	
500-173293-12	2615V2-01-B46 (0-4)	Total/NA	Solid	9045D	
500-173293-13	2615V2-01-B46 (4-8)	Total/NA	Solid	9045D	
500-173293-14	2615V2-01-B48 (0-6)	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

General Chemistry (Continued)

Analysis Batch: 515575 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173293-15	2615V2-01-B49 (0-5)	Total/NA	Solid	9045D	
LCS 500-515575/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-515575/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173293-3 DU	2615V2-01-B37 (0-2)	Total/NA	Solid	9045D	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-173293-1	2615V2-01-B36 (0-4)	96	91	91	99
500-173293-2	2615V2-01-B36 (4-8)	96	93	91	101
500-173293-3	2615V2-01-B37 (0-2)	90	89	93	97
500-173293-4	2615V2-01-B38 (0-5)	95	86	91	98
500-173293-5	2615V2-01-B38 (5-10)	96	96	92	98
500-173293-6	2615V2-01-B38 (10-15)	96	96	94	99
500-173293-7	2615V2-01-B42 (0-7)	96	98	93	99
500-173293-8	2615V2-01-B43 (0-7)	114	94	93	104
500-173293-9	2615V2-01-B44 (0-4)	90	96	93	95
500-173293-10	2615V2-01-B45 (0-4)	90	93	93	95
500-173293-11	2615V2-01-B45 (4-8)	94	100	94	99
500-173293-12	2615V2-01-B46 (0-4)	104	94	92	101
500-173293-13	2615V2-01-B46 (4-8)	95	94	92	100
500-173293-14	2615V2-01-B48 (0-6)	93	96	96	97
500-173293-15	2615V2-01-B49 (0-5)	98	94	91	100
LCS 500-516317/4	Lab Control Sample	88	93	89	94
LCS 500-516539/4	Lab Control Sample	85	94	89	95
LCSD 500-516317/5	Lab Control Sample Dup	86	94	90	94
LCSD 500-516539/5	Lab Control Sample Dup	87	94	91	94
MB 500-516317/7	Method Blank	89	93	90	94
MB 500-516539/7	Method Blank	92	91	90	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173293-1	2615V2-01-B36 (0-4)	65	61	77	77	60	95
500-173293-2	2615V2-01-B36 (4-8)	60	69	65	76	46	87
500-173293-2 MS	2615V2-01-B36 (4-8)	68	60	67	75	55	86
500-173293-2 MSD	2615V2-01-B36 (4-8)	66	55	68	78	64	86
500-173293-3	2615V2-01-B37 (0-2)	53	63	61	74	32	116
500-173293-4	2615V2-01-B38 (0-5)	58	66	62	76	54	114
500-173293-5	2615V2-01-B38 (5-10)	62	66	66	77	59	100
500-173293-6	2615V2-01-B38 (10-15)	65	71	64	111	44	133
500-173293-7	2615V2-01-B42 (0-7)	54	62	74	79	57	144
500-173293-8	2615V2-01-B43 (0-7)	42	47	53	73	54	129
500-173293-9	2615V2-01-B44 (0-4)	51	52	46	65	63	96
500-173293-10	2615V2-01-B45 (0-4)	68	71	65	82	55	131
500-173293-11	2615V2-01-B45 (4-8)	79	76	73	82	78	127
500-173293-12	2615V2-01-B46 (0-4)	59	79	68	85	72	100
500-173293-13	2615V2-01-B46 (4-8)	51	64	48	77	56	133
500-173293-14	2615V2-01-B48 (0-6)	61	66	64	79	63	97

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173293-15	2615V2-01-B49 (0-5)	65	61	69	79	64	94
LCS 500-516260/2-A	Lab Control Sample	79	72	77	88	99	95
MB 500-516260/1-A	Method Blank	68	69	70	83	70	94

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516317/7
Matrix: Solid
Analysis Batch: 516317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			11/20/19 11:02	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 11:02	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/20/19 11:02	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 11:02	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/20/19 11:02	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/20/19 11:02	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/20/19 11:02	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 11:02	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/20/19 11:02	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 11:02	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 11:02	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 11:02	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/20/19 11:02	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 11:02	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/20/19 11:02	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 11:02	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 11:02	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 11:02	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/20/19 11:02	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 11:02	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/20/19 11:02	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 11:02	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 11:02	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 11:02	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/20/19 11:02	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 11:02	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/20/19 11:02	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 11:02	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 11:02	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 11:02	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 11:02	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/20/19 11:02	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/20/19 11:02	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 11:02	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/20/19 11:02	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 11:02	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/20/19 11:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		75 - 131		11/20/19 11:02	1
Dibromofluoromethane	93		75 - 126		11/20/19 11:02	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		11/20/19 11:02	1
Toluene-d8 (Surr)	94		75 - 124		11/20/19 11:02	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516317/4
Matrix: Solid
Analysis Batch: 516317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0449		mg/Kg		90	40 - 150
Benzene	0.0500	0.0459		mg/Kg		92	70 - 125
Bromodichloromethane	0.0500	0.0429		mg/Kg		86	67 - 129
Bromoform	0.0500	0.0410		mg/Kg		82	68 - 136
Bromomethane	0.0500	0.0528		mg/Kg		106	70 - 130
2-Butanone (MEK)	0.0500	0.0364		mg/Kg		73	47 - 138
Carbon disulfide	0.0500	0.0526		mg/Kg		105	70 - 129
Carbon tetrachloride	0.0500	0.0458		mg/Kg		92	75 - 125
Chlorobenzene	0.0500	0.0459		mg/Kg		92	50 - 150
Chloroethane	0.0500	0.0656	*	mg/Kg		131	75 - 125
Chloroform	0.0500	0.0445		mg/Kg		89	57 - 135
Chloromethane	0.0500	0.0479		mg/Kg		96	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0459		mg/Kg		92	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0416		mg/Kg		83	70 - 125
Dibromochloromethane	0.0500	0.0426		mg/Kg		85	69 - 125
1,1-Dichloroethane	0.0500	0.0479		mg/Kg		96	70 - 125
1,2-Dichloroethane	0.0500	0.0435		mg/Kg		87	70 - 130
1,1-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 120
1,2-Dichloropropane	0.0500	0.0471		mg/Kg		94	70 - 125
Ethylbenzene	0.0500	0.0462		mg/Kg		92	61 - 136
2-Hexanone	0.0500	0.0395		mg/Kg		79	48 - 146
Methylene Chloride	0.0500	0.0447		mg/Kg		89	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0391		mg/Kg		78	50 - 148
Methyl tert-butyl ether	0.0500	0.0435		mg/Kg		87	50 - 140
Styrene	0.0500	0.0430		mg/Kg		86	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0433		mg/Kg		87	70 - 122
Tetrachloroethene	0.0500	0.0495		mg/Kg		99	70 - 124
Toluene	0.0500	0.0456		mg/Kg		91	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0483		mg/Kg		97	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0409		mg/Kg		82	70 - 125
1,1,1-Trichloroethane	0.0500	0.0457		mg/Kg		91	70 - 128
1,1,2-Trichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125
Trichloroethene	0.0500	0.0478		mg/Kg		96	70 - 125
Vinyl acetate	0.0500	0.0343		mg/Kg		69	40 - 153
Vinyl chloride	0.0500	0.0531		mg/Kg		106	70 - 125
Xylenes, Total	0.100	0.0845		mg/Kg		85	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		75 - 131
Dibromofluoromethane	93		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516317/5
Matrix: Solid
Analysis Batch: 516317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0535		mg/Kg		107	40 - 150	17	30
Benzene	0.0500	0.0462		mg/Kg		92	70 - 125	1	30
Bromodichloromethane	0.0500	0.0442		mg/Kg		88	67 - 129	3	30
Bromoform	0.0500	0.0448		mg/Kg		90	68 - 136	9	30
Bromomethane	0.0500	0.0490		mg/Kg		98	70 - 130	8	30
2-Butanone (MEK)	0.0500	0.0432		mg/Kg		86	47 - 138	17	30
Carbon disulfide	0.0500	0.0519		mg/Kg		104	70 - 129	1	30
Carbon tetrachloride	0.0500	0.0454		mg/Kg		91	75 - 125	1	30
Chlorobenzene	0.0500	0.0456		mg/Kg		91	50 - 150	1	30
Chloroethane	0.0500	0.0604		mg/Kg		121	75 - 125	8	30
Chloroform	0.0500	0.0455		mg/Kg		91	57 - 135	2	30
Chloromethane	0.0500	0.0439		mg/Kg		88	70 - 125	9	30
cis-1,2-Dichloroethene	0.0500	0.0465		mg/Kg		93	70 - 125	1	30
cis-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125	2	30
Dibromochloromethane	0.0500	0.0446		mg/Kg		89	69 - 125	5	30
1,1-Dichloroethane	0.0500	0.0475		mg/Kg		95	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0444		mg/Kg		89	70 - 130	2	30
1,1-Dichloroethene	0.0500	0.0483		mg/Kg		97	70 - 120	1	30
1,2-Dichloropropane	0.0500	0.0471		mg/Kg		94	70 - 125	0	30
Ethylbenzene	0.0500	0.0457		mg/Kg		91	61 - 136	1	30
2-Hexanone	0.0500	0.0444		mg/Kg		89	48 - 146	12	30
Methylene Chloride	0.0500	0.0456		mg/Kg		91	70 - 126	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0440		mg/Kg		88	50 - 148	12	30
Methyl tert-butyl ether	0.0500	0.0470		mg/Kg		94	50 - 140	8	30
Styrene	0.0500	0.0436		mg/Kg		87	70 - 125	1	30
1,1,1,2-Tetrachloroethane	0.0500	0.0465		mg/Kg		93	70 - 122	7	30
Tetrachloroethene	0.0500	0.0489		mg/Kg		98	70 - 124	1	30
Toluene	0.0500	0.0449		mg/Kg		90	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0489		mg/Kg		98	70 - 125	1	30
trans-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125	3	30
1,1,1-Trichloroethane	0.0500	0.0457		mg/Kg		91	70 - 128	0	30
1,1,2-Trichloroethane	0.0500	0.0468		mg/Kg		94	70 - 125	4	30
Trichloroethene	0.0500	0.0476		mg/Kg		95	70 - 125	0	30
Vinyl acetate	0.0500	0.0343		mg/Kg		69	40 - 153	0	30
Vinyl chloride	0.0500	0.0483		mg/Kg		97	70 - 125	9	30
Xylenes, Total	0.100	0.0846		mg/Kg		85	53 - 147	0	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	86		75 - 131
Dibromofluoromethane	94		75 - 126
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516539/7
Matrix: Solid
Analysis Batch: 516539

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			11/21/19 11:10	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/21/19 11:10	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/21/19 11:10	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/21/19 11:10	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/21/19 11:10	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/21/19 11:10	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/21/19 11:10	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/21/19 11:10	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/21/19 11:10	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/21/19 11:10	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:10	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/21/19 11:10	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/21/19 11:10	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/21/19 11:10	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/21/19 11:10	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:10	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/21/19 11:10	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:10	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/21/19 11:10	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/21/19 11:10	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/21/19 11:10	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/21/19 11:10	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/21/19 11:10	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/21/19 11:10	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/21/19 11:10	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/21/19 11:10	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/21/19 11:10	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/21/19 11:10	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/21/19 11:10	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/21/19 11:10	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/21/19 11:10	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/21/19 11:10	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/21/19 11:10	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/21/19 11:10	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/21/19 11:10	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/21/19 11:10	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/21/19 11:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131		11/21/19 11:10	1
Dibromofluoromethane	91		75 - 126		11/21/19 11:10	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		11/21/19 11:10	1
Toluene-d8 (Surr)	96		75 - 124		11/21/19 11:10	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516539/4

Matrix: Solid

Analysis Batch: 516539

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0462		mg/Kg		92	40 - 150
Benzene	0.0500	0.0479		mg/Kg		96	70 - 125
Bromodichloromethane	0.0500	0.0438		mg/Kg		88	67 - 129
Bromoform	0.0500	0.0436		mg/Kg		87	68 - 136
Bromomethane	0.0500	0.0528		mg/Kg		106	70 - 130
2-Butanone (MEK)	0.0500	0.0415		mg/Kg		83	47 - 138
Carbon disulfide	0.0500	0.0546		mg/Kg		109	70 - 129
Carbon tetrachloride	0.0500	0.0473		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0464		mg/Kg		93	50 - 150
Chloroethane	0.0500	0.0661	*	mg/Kg		132	75 - 125
Chloroform	0.0500	0.0465		mg/Kg		93	57 - 135
Chloromethane	0.0500	0.0491		mg/Kg		98	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0478		mg/Kg		96	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0430		mg/Kg		86	70 - 125
Dibromochloromethane	0.0500	0.0437		mg/Kg		87	69 - 125
1,1-Dichloroethane	0.0500	0.0497		mg/Kg		99	70 - 125
1,2-Dichloroethane	0.0500	0.0449		mg/Kg		90	70 - 130
1,1-Dichloroethene	0.0500	0.0502		mg/Kg		100	70 - 120
1,2-Dichloropropane	0.0500	0.0476		mg/Kg		95	70 - 125
Ethylbenzene	0.0500	0.0470		mg/Kg		94	61 - 136
2-Hexanone	0.0500	0.0429		mg/Kg		86	48 - 146
Methylene Chloride	0.0500	0.0460		mg/Kg		92	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0430		mg/Kg		86	50 - 148
Methyl tert-butyl ether	0.0500	0.0439		mg/Kg		88	50 - 140
Styrene	0.0500	0.0446		mg/Kg		89	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0443		mg/Kg		89	70 - 122
Tetrachloroethene	0.0500	0.0513		mg/Kg		103	70 - 124
Toluene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0501		mg/Kg		100	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0412		mg/Kg		82	70 - 125
1,1,1-Trichloroethane	0.0500	0.0464		mg/Kg		93	70 - 128
1,1,2-Trichloroethane	0.0500	0.0458		mg/Kg		92	70 - 125
Trichloroethene	0.0500	0.0488		mg/Kg		98	70 - 125
Vinyl acetate	0.0500	0.0320		mg/Kg		64	40 - 153
Vinyl chloride	0.0500	0.0516		mg/Kg		103	70 - 125
Xylenes, Total	0.100	0.0889		mg/Kg		89	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	85		75 - 131
Dibromofluoromethane	94		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516539/5
Matrix: Solid
Analysis Batch: 516539

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0479		mg/Kg		96	40 - 150	4	30
Benzene	0.0500	0.0477		mg/Kg		95	70 - 125	0	30
Bromodichloromethane	0.0500	0.0460		mg/Kg		92	67 - 129	5	30
Bromoform	0.0500	0.0447		mg/Kg		89	68 - 136	3	30
Bromomethane	0.0500	0.0530		mg/Kg		106	70 - 130	0	30
2-Butanone (MEK)	0.0500	0.0444		mg/Kg		89	47 - 138	7	30
Carbon disulfide	0.0500	0.0537		mg/Kg		107	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0467		mg/Kg		93	75 - 125	1	30
Chlorobenzene	0.0500	0.0463		mg/Kg		93	50 - 150	0	30
Chloroethane	0.0500	0.0665	*	mg/Kg		133	75 - 125	1	30
Chloroform	0.0500	0.0463		mg/Kg		93	57 - 135	0	30
Chloromethane	0.0500	0.0493		mg/Kg		99	70 - 125	0	30
cis-1,2-Dichloroethene	0.0500	0.0481		mg/Kg		96	70 - 125	1	30
cis-1,3-Dichloropropene	0.0500	0.0437		mg/Kg		87	70 - 125	1	30
Dibromochloromethane	0.0500	0.0453		mg/Kg		91	69 - 125	4	30
1,1-Dichloroethane	0.0500	0.0500		mg/Kg		100	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0463		mg/Kg		93	70 - 130	3	30
1,1-Dichloroethene	0.0500	0.0504		mg/Kg		101	70 - 120	0	30
1,2-Dichloropropane	0.0500	0.0499		mg/Kg		100	70 - 125	5	30
Ethylbenzene	0.0500	0.0463		mg/Kg		93	61 - 136	1	30
2-Hexanone	0.0500	0.0442		mg/Kg		88	48 - 146	3	30
Methylene Chloride	0.0500	0.0461		mg/Kg		92	70 - 126	0	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0444		mg/Kg		89	50 - 148	3	30
Methyl tert-butyl ether	0.0500	0.0469		mg/Kg		94	50 - 140	7	30
Styrene	0.0500	0.0441		mg/Kg		88	70 - 125	1	30
1,1,2,2-Tetrachloroethane	0.0500	0.0487		mg/Kg		97	70 - 122	9	30
Tetrachloroethene	0.0500	0.0500		mg/Kg		100	70 - 124	3	30
Toluene	0.0500	0.0462		mg/Kg		92	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0495		mg/Kg		99	70 - 125	1	30
trans-1,3-Dichloropropene	0.0500	0.0429		mg/Kg		86	70 - 125	4	30
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 128	2	30
1,1,2-Trichloroethane	0.0500	0.0479		mg/Kg		96	70 - 125	4	30
Trichloroethene	0.0500	0.0484		mg/Kg		97	70 - 125	1	30
Vinyl acetate	0.0500	0.0326		mg/Kg		65	40 - 153	2	30
Vinyl chloride	0.0500	0.0518		mg/Kg		104	70 - 125	0	30
Xylenes, Total	0.100	0.0864		mg/Kg		86	53 - 147	3	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	87		75 - 131
Dibromofluoromethane	94		75 - 126
1,2-Dichloroethane-d4 (Surr)	91		70 - 134
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516260/1-A
Matrix: Solid
Analysis Batch: 516394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516260

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/19/19 16:34	11/20/19 13:59	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516260/1-A
Matrix: Solid
Analysis Batch: 516394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516260

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/19/19 16:34	11/20/19 13:59	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/19/19 16:34	11/20/19 13:59	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	68		31 - 166	11/19/19 16:34	11/20/19 13:59	1
Phenol-d5	69		30 - 153	11/19/19 16:34	11/20/19 13:59	1
Nitrobenzene-d5	70		37 - 147	11/19/19 16:34	11/20/19 13:59	1
2-Fluorobiphenyl	83		43 - 145	11/19/19 16:34	11/20/19 13:59	1
2,4,6-Tribromophenol	70		31 - 143	11/19/19 16:34	11/20/19 13:59	1
Terphenyl-d14	94		42 - 157	11/19/19 16:34	11/20/19 13:59	1

Lab Sample ID: LCS 500-516260/2-A
Matrix: Solid
Analysis Batch: 516394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-chloroethyl)ether	1.33	1.02		mg/Kg		76	55 - 111
1,3-Dichlorobenzene	1.33	1.11		mg/Kg		83	65 - 124
1,4-Dichlorobenzene	1.33	1.10		mg/Kg		82	61 - 110
1,2-Dichlorobenzene	1.33	1.11		mg/Kg		83	62 - 110
2-Methylphenol	1.33	1.03		mg/Kg		77	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.508	*	mg/Kg		38	40 - 124
N-Nitrosodi-n-propylamine	1.33	0.924		mg/Kg		69	56 - 118
Hexachloroethane	1.33	1.04		mg/Kg		78	60 - 114
2-Chlorophenol	1.33	1.10		mg/Kg		83	64 - 110
Nitrobenzene	1.33	1.09		mg/Kg		82	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.04		mg/Kg		78	60 - 112
1,2,4-Trichlorobenzene	1.33	1.36		mg/Kg		102	66 - 117
Isophorone	1.33	1.01		mg/Kg		76	55 - 110
2,4-Dimethylphenol	1.33	1.11		mg/Kg		83	60 - 110
Hexachlorobutadiene	1.33	1.37		mg/Kg		103	56 - 120
Naphthalene	1.33	1.12		mg/Kg		84	63 - 110
2,4-Dichlorophenol	1.33	1.26		mg/Kg		94	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516260/2-A
Matrix: Solid
Analysis Batch: 516394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.18		mg/Kg		89	30 - 150
2,4,6-Trichlorophenol	1.33	1.19		mg/Kg		89	57 - 120
2,4,5-Trichlorophenol	1.33	1.11		mg/Kg		83	50 - 120
Hexachlorocyclopentadiene	1.33	0.463	J	mg/Kg		35	10 - 133
2-Methylnaphthalene	1.33	1.36		mg/Kg		102	69 - 112
2-Nitroaniline	1.33	0.974		mg/Kg		73	57 - 124
2-Chloronaphthalene	1.33	1.12		mg/Kg		84	69 - 114
4-Chloro-3-methylphenol	1.33	1.07		mg/Kg		81	65 - 122
2,6-Dinitrotoluene	1.33	1.19		mg/Kg		90	70 - 123
2-Nitrophenol	1.33	1.13		mg/Kg		85	60 - 120
3-Nitroaniline	1.33	1.06		mg/Kg		80	40 - 122
Dimethyl phthalate	1.33	1.12		mg/Kg		84	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		2	10 - 100
Acenaphthylene	1.33	1.09		mg/Kg		82	68 - 120
2,4-Dinitrotoluene	1.33	1.21		mg/Kg		91	69 - 124
Acenaphthene	1.33	1.10		mg/Kg		83	65 - 124
Dibenzofuran	1.33	1.18		mg/Kg		89	66 - 115
4-Nitrophenol	2.67	1.99		mg/Kg		75	30 - 122
Fluorene	1.33	1.12		mg/Kg		84	62 - 120
4-Nitroaniline	1.33	0.996		mg/Kg		75	60 - 160
4-Bromophenyl phenyl ether	1.33	1.25		mg/Kg		94	68 - 118
Hexachlorobenzene	1.33	1.28		mg/Kg		96	63 - 124
Diethyl phthalate	1.33	1.12		mg/Kg		84	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.20		mg/Kg		90	62 - 119
Pentachlorophenol	2.67	1.02		mg/Kg		38	13 - 112
N-Nitrosodiphenylamine	1.33	1.09		mg/Kg		82	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.513	J	mg/Kg		19	10 - 110
Phenanthrene	1.33	1.11		mg/Kg		83	62 - 120
Anthracene	1.33	1.14		mg/Kg		85	70 - 114
Carbazole	1.33	1.13		mg/Kg		85	65 - 142
Di-n-butyl phthalate	1.33	1.09		mg/Kg		82	65 - 120
Fluoranthene	1.33	1.23		mg/Kg		92	62 - 120
Pyrene	1.33	1.23		mg/Kg		92	61 - 128
Butyl benzyl phthalate	1.33	1.04		mg/Kg		78	71 - 129
Benzo[a]anthracene	1.33	1.21		mg/Kg		91	67 - 122
Chrysene	1.33	1.17		mg/Kg		88	63 - 120
3,3'-Dichlorobenzidine	1.33	1.03		mg/Kg		78	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.04		mg/Kg		78	72 - 131
Di-n-octyl phthalate	1.33	0.988		mg/Kg		74	68 - 134
Benzo[b]fluoranthene	1.33	1.14		mg/Kg		85	69 - 129
Benzo[k]fluoranthene	1.33	1.23		mg/Kg		92	68 - 127
Benzo[a]pyrene	1.33	1.24		mg/Kg		93	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.26		mg/Kg		94	68 - 130
Dibenz(a,h)anthracene	1.33	1.26		mg/Kg		94	64 - 131
Benzo[g,h,i]perylene	1.33	1.24		mg/Kg		93	72 - 131
3 & 4 Methylphenol	1.33	1.01		mg/Kg		76	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516260/2-A
Matrix: Solid
Analysis Batch: 516394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516260

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	79		31 - 166
Phenol-d5	72		30 - 153
Nitrobenzene-d5	77		37 - 147
2-Fluorobiphenyl	88		43 - 145
2,4,6-Tribromophenol	99		31 - 143
Terphenyl-d14	95		42 - 157

Lab Sample ID: 500-173293-2 MS
Matrix: Solid
Analysis Batch: 516982

Client Sample ID: 2615V2-01-B36 (4-8)
Prep Type: Total/NA
Prep Batch: 516260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.19		1.54	0.979		mg/Kg	☼	64	56 - 122
Bis(2-chloroethyl)ether	<0.19		1.54	1.06		mg/Kg	☼	69	55 - 111
1,3-Dichlorobenzene	<0.19		1.54	1.03		mg/Kg	☼	67	60 - 110
1,4-Dichlorobenzene	<0.19		1.54	1.05		mg/Kg	☼	69	61 - 110
1,2-Dichlorobenzene	<0.19		1.54	1.08		mg/Kg	☼	70	62 - 110
2-Methylphenol	<0.19		1.54	1.01		mg/Kg	☼	66	60 - 120
2,2'-oxybis[1-chloropropane]	<0.19	F1 * F2	1.54	0.475	F1	mg/Kg	☼	31	40 - 124
N-Nitrosodi-n-propylamine	<0.078		1.54	0.968		mg/Kg	☼	63	56 - 118
Hexachloroethane	<0.19	F1	1.54	0.637	F1	mg/Kg	☼	42	60 - 114
2-Chlorophenol	<0.19		1.54	1.09		mg/Kg	☼	71	64 - 110
Nitrobenzene	<0.038		1.54	1.14		mg/Kg	☼	75	60 - 116
Bis(2-chloroethoxy)methane	<0.19		1.54	1.10		mg/Kg	☼	72	60 - 112
1,2,4-Trichlorobenzene	<0.19		1.54	1.37		mg/Kg	☼	90	66 - 117
Isophorone	<0.19		1.54	1.12		mg/Kg	☼	73	55 - 110
2,4-Dimethylphenol	<0.38		1.54	1.16		mg/Kg	☼	76	60 - 110
Hexachlorobutadiene	<0.19		1.54	1.38		mg/Kg	☼	90	56 - 120
Naphthalene	<0.038		1.54	1.14		mg/Kg	☼	74	63 - 110
2,4-Dichlorophenol	<0.38		1.54	1.28		mg/Kg	☼	83	58 - 120
4-Chloroaniline	<0.78		1.54	0.840		mg/Kg	☼	55	30 - 150
2,4,6-Trichlorophenol	<0.38		1.54	0.923		mg/Kg	☼	60	57 - 120
2,4,5-Trichlorophenol	<0.38		1.54	0.947		mg/Kg	☼	62	50 - 120
Hexachlorocyclopentadiene	<0.78	F1	1.54	<0.77	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.024	J	1.54	1.68		mg/Kg	☼	108	69 - 112
2-Nitroaniline	<0.19		1.54	1.09		mg/Kg	☼	71	57 - 124
2-Chloronaphthalene	<0.19		1.54	1.16		mg/Kg	☼	76	69 - 114
4-Chloro-3-methylphenol	<0.38		1.54	1.12		mg/Kg	☼	73	65 - 122
2,6-Dinitrotoluene	<0.19		1.54	1.27		mg/Kg	☼	83	70 - 123
2-Nitrophenol	<0.38		1.54	1.12		mg/Kg	☼	73	60 - 120
3-Nitroaniline	<0.38		1.54	0.995		mg/Kg	☼	65	40 - 122
Dimethyl phthalate	<0.19		1.54	1.24		mg/Kg	☼	81	69 - 116
2,4-Dinitrophenol	<0.78	F1 *	3.07	<0.77	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.038		1.54	1.15		mg/Kg	☼	75	68 - 120
2,4-Dinitrotoluene	<0.19		1.54	1.27		mg/Kg	☼	83	69 - 124
Acenaphthene	<0.038		1.54	1.22		mg/Kg	☼	80	65 - 124
Dibenzofuran	<0.19		1.54	1.29		mg/Kg	☼	84	66 - 115
4-Nitrophenol	<0.78	F1 F2	3.07	1.23		mg/Kg	☼	40	30 - 122

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173293-2 MS
Matrix: Solid
Analysis Batch: 516982

Client Sample ID: 2615V2-01-B36 (4-8)
Prep Type: Total/NA
Prep Batch: 516260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	<0.038		1.54	1.24		mg/Kg	☼	81	62 - 120
4-Nitroaniline	<0.38		1.54	1.02		mg/Kg	☼	66	60 - 160
4-Bromophenyl phenyl ether	<0.19		1.54	1.49		mg/Kg	☼	97	68 - 118
Hexachlorobenzene	<0.078		1.54	1.55		mg/Kg	☼	101	63 - 124
Diethyl phthalate	<0.19		1.54	1.25		mg/Kg	☼	82	58 - 120
4-Chlorophenyl phenyl ether	<0.19		1.54	1.29		mg/Kg	☼	84	62 - 119
Pentachlorophenol	<0.78	F1	3.07	0.770		mg/Kg	☼	25	13 - 112
N-Nitrosodiphenylamine	<0.19		1.54	1.45		mg/Kg	☼	95	65 - 112
4,6-Dinitro-2-methylphenol	<0.78	F2	3.07	1.13		mg/Kg	☼	37	10 - 110
Phenanthrene	0.096		1.54	1.51		mg/Kg	☼	92	62 - 120
Anthracene	<0.038		1.54	1.36		mg/Kg	☼	89	70 - 114
Carbazole	<0.19		1.54	1.32		mg/Kg	☼	86	65 - 142
Di-n-butyl phthalate	<0.19		1.54	1.26		mg/Kg	☼	82	65 - 120
Fluoranthene	<0.038		1.54	1.35		mg/Kg	☼	88	62 - 120
Pyrene	0.014	J	1.54	1.34		mg/Kg	☼	86	61 - 128
Butyl benzyl phthalate	<0.19		1.54	1.09		mg/Kg	☼	71	71 - 129
Benzo[a]anthracene	<0.038		1.54	1.32		mg/Kg	☼	86	67 - 122
Chrysene	<0.038		1.54	1.35		mg/Kg	☼	88	63 - 120
3,3'-Dichlorobenzidine	<0.19		1.54	0.835		mg/Kg	☼	54	35 - 128
Bis(2-ethylhexyl) phthalate	<0.19		1.54	1.26		mg/Kg	☼	82	72 - 131
Di-n-octyl phthalate	<0.19	F1	1.54	1.17		mg/Kg	☼	76	68 - 134
Benzo[b]fluoranthene	<0.038	F1	1.54	1.29		mg/Kg	☼	84	69 - 129
Benzo[k]fluoranthene	<0.038		1.54	1.83		mg/Kg	☼	119	68 - 127
Benzo[a]pyrene	<0.038		1.54	1.46		mg/Kg	☼	95	65 - 133
Indeno[1,2,3-cd]pyrene	<0.038	F1	1.54	1.25		mg/Kg	☼	81	68 - 130
Dibenz(a,h)anthracene	<0.038		1.54	1.25		mg/Kg	☼	82	64 - 131
Benzo[g,h,i]perylene	<0.038	F1	1.54	1.01	F1	mg/Kg	☼	66	72 - 131
3 & 4 Methylphenol	<0.19		1.54	0.971		mg/Kg	☼	63	57 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	68		31 - 166
Phenol-d5	60		30 - 153
Nitrobenzene-d5	67		37 - 147
2-Fluorobiphenyl	75		43 - 145
2,4,6-Tribromophenol	55		31 - 143
Terphenyl-d14	86		42 - 157

Lab Sample ID: 500-173293-2 MSD
Matrix: Solid
Analysis Batch: 516982

Client Sample ID: 2615V2-01-B36 (4-8)
Prep Type: Total/NA
Prep Batch: 516260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenol	<0.19		1.54	0.987		mg/Kg	☼	64	56 - 122	1	30
Bis(2-chloroethyl)ether	<0.19		1.54	1.01		mg/Kg	☼	66	55 - 111	5	30
1,3-Dichlorobenzene	<0.19		1.54	1.04		mg/Kg	☼	68	60 - 110	1	30
1,4-Dichlorobenzene	<0.19		1.54	1.07		mg/Kg	☼	70	61 - 110	2	30
1,2-Dichlorobenzene	<0.19		1.54	1.10		mg/Kg	☼	71	62 - 110	2	30
2-Methylphenol	<0.19		1.54	1.04		mg/Kg	☼	67	60 - 120	3	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173293-2 MSD

Matrix: Solid

Analysis Batch: 516982

Client Sample ID: 2615V2-01-B36 (4-8)

Prep Type: Total/NA

Prep Batch: 516260

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier				Limits		Limit
2,2'-oxybis[1-chloropropane]	<0.19	F1 * F2	1.54	0.704	F2	mg/Kg	☼	46	40 - 124	39	30
N-Nitrosodi-n-propylamine	<0.078		1.54	0.955		mg/Kg	☼	62	56 - 118	1	30
Hexachloroethane	<0.19	F1	1.54	0.686	F1	mg/Kg	☼	44	60 - 114	7	30
2-Chlorophenol	<0.19		1.54	1.10		mg/Kg	☼	71	64 - 110	1	30
Nitrobenzene	<0.038		1.54	1.22		mg/Kg	☼	79	60 - 116	6	30
Bis(2-chloroethoxy)methane	<0.19		1.54	1.14		mg/Kg	☼	74	60 - 112	3	30
1,2,4-Trichlorobenzene	<0.19		1.54	1.33		mg/Kg	☼	86	66 - 117	3	30
Isophorone	<0.19		1.54	1.07		mg/Kg	☼	69	55 - 110	5	30
2,4-Dimethylphenol	<0.38		1.54	1.17		mg/Kg	☼	76	60 - 110	1	30
Hexachlorobutadiene	<0.19		1.54	1.27		mg/Kg	☼	82	56 - 120	9	30
Naphthalene	<0.038		1.54	1.14		mg/Kg	☼	74	63 - 110	0	30
2,4-Dichlorophenol	<0.38		1.54	1.18		mg/Kg	☼	77	58 - 120	8	30
4-Chloroaniline	<0.78		1.54	0.834		mg/Kg	☼	54	30 - 150	1	30
2,4,6-Trichlorophenol	<0.38		1.54	1.04		mg/Kg	☼	68	57 - 120	12	30
2,4,5-Trichlorophenol	<0.38		1.54	0.986		mg/Kg	☼	64	50 - 120	4	30
Hexachlorocyclopentadiene	<0.78	F1	1.54	<0.77	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.024	J	1.54	1.58		mg/Kg	☼	101	69 - 112	6	30
2-Nitroaniline	<0.19		1.54	1.12		mg/Kg	☼	73	57 - 124	3	30
2-Chloronaphthalene	<0.19		1.54	1.19		mg/Kg	☼	77	69 - 114	2	30
4-Chloro-3-methylphenol	<0.38		1.54	1.10		mg/Kg	☼	71	65 - 122	2	30
2,6-Dinitrotoluene	<0.19		1.54	1.20		mg/Kg	☼	78	70 - 123	6	30
2-Nitrophenol	<0.38		1.54	1.13		mg/Kg	☼	74	60 - 120	1	30
3-Nitroaniline	<0.38		1.54	1.01		mg/Kg	☼	65	40 - 122	1	30
Dimethyl phthalate	<0.19		1.54	1.22		mg/Kg	☼	79	69 - 116	2	30
2,4-Dinitrophenol	<0.78	F1 *	3.08	<0.77	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.038		1.54	1.17		mg/Kg	☼	76	68 - 120	2	30
2,4-Dinitrotoluene	<0.19		1.54	1.17		mg/Kg	☼	76	69 - 124	8	30
Acenaphthene	<0.038		1.54	1.21		mg/Kg	☼	79	65 - 124	1	30
Dibenzofuran	<0.19		1.54	1.30		mg/Kg	☼	84	66 - 115	1	30
4-Nitrophenol	<0.78	F1 F2	3.08	0.789	F1 F2	mg/Kg	☼	26	30 - 122	43	30
Fluorene	<0.038		1.54	1.31		mg/Kg	☼	85	62 - 120	6	30
4-Nitroaniline	<0.38		1.54	1.08		mg/Kg	☼	70	60 - 160	6	30
4-Bromophenyl phenyl ether	<0.19		1.54	1.33		mg/Kg	☼	86	68 - 118	12	30
Hexachlorobenzene	<0.078		1.54	1.40		mg/Kg	☼	91	63 - 124	10	30
Diethyl phthalate	<0.19		1.54	1.27		mg/Kg	☼	83	58 - 120	2	30
4-Chlorophenyl phenyl ether	<0.19		1.54	1.36		mg/Kg	☼	88	62 - 119	5	30
Pentachlorophenol	<0.78	F1	3.08	<0.77	F1	mg/Kg	☼	0	13 - 112	NC	30
N-Nitrosodiphenylamine	<0.19		1.54	1.33		mg/Kg	☼	86	65 - 112	9	30
4,6-Dinitro-2-methylphenol	<0.78	F2	3.08	0.796	F2	mg/Kg	☼	26	10 - 110	35	30
Phenanthrene	0.096		1.54	1.35		mg/Kg	☼	81	62 - 120	11	30
Anthracene	<0.038		1.54	1.25		mg/Kg	☼	81	70 - 114	9	30
Carbazole	<0.19		1.54	1.31		mg/Kg	☼	85	65 - 142	0	30
Di-n-butyl phthalate	<0.19		1.54	1.24		mg/Kg	☼	81	65 - 120	2	30
Fluoranthene	<0.038		1.54	1.23		mg/Kg	☼	80	62 - 120	9	30
Pyrene	0.014	J	1.54	1.43		mg/Kg	☼	92	61 - 128	7	30
Butyl benzyl phthalate	<0.19		1.54	1.25		mg/Kg	☼	81	71 - 129	14	30
Benzo[a]anthracene	<0.038		1.54	1.29		mg/Kg	☼	83	67 - 122	3	30
Chrysene	<0.038		1.54	1.26		mg/Kg	☼	82	63 - 120	7	30
3,3'-Dichlorobenzidine	<0.19		1.54	0.826		mg/Kg	☼	54	35 - 128	1	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173293-2 MSD

Matrix: Solid

Analysis Batch: 516982

Client Sample ID: 2615V2-01-B36 (4-8)

Prep Type: Total/NA

Prep Batch: 516260

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bis(2-ethylhexyl) phthalate	<0.19		1.54	1.31		mg/Kg	☼	85	72 - 131	4	30
Di-n-octyl phthalate	<0.19	F1	1.54	1.03	F1	mg/Kg	☼	67	68 - 134	13	30
Benzo[b]fluoranthene	<0.038	F1	1.54	1.05	F1	mg/Kg	☼	68	69 - 129	20	30
Benzo[k]fluoranthene	<0.038		1.54	1.65		mg/Kg	☼	107	68 - 127	10	30
Benzo[a]pyrene	<0.038		1.54	1.34		mg/Kg	☼	87	65 - 133	8	30
Indeno[1,2,3-cd]pyrene	<0.038	F1	1.54	1.03	F1	mg/Kg	☼	67	68 - 130	19	30
Dibenz(a,h)anthracene	<0.038		1.54	1.05		mg/Kg	☼	68	64 - 131	18	30
Benzo[g,h,i]perylene	<0.038	F1	1.54	0.880	F1	mg/Kg	☼	57	72 - 131	13	30
3 & 4 Methylphenol	<0.19		1.54	0.985		mg/Kg	☼	64	57 - 120	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	66		31 - 166
Phenol-d5	55		30 - 153
Nitrobenzene-d5	68		37 - 147
2-Fluorobiphenyl	78		43 - 145
2,4,6-Tribromophenol	64		31 - 143
Terphenyl-d14	86		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-516246/2-A

Matrix: Solid

Analysis Batch: 516528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Manganese	0.500	0.548		mg/L		110	80 - 120	

Lab Sample ID: LCS 500-516249/2-A

Matrix: Solid

Analysis Batch: 516527

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Barium	0.500	0.493	J	mg/L		99	80 - 120	
Beryllium	0.0500	0.0480		mg/L		96	80 - 120	
Boron	1.00	0.856		mg/L		86	80 - 120	
Cadmium	0.0500	0.0465		mg/L		93	80 - 120	
Chromium	0.200	0.191		mg/L		95	80 - 120	
Cobalt	0.500	0.493		mg/L		99	80 - 120	
Iron	1.00	0.976		mg/L		98	80 - 120	
Lead	0.100	0.0937		mg/L		94	80 - 120	
Manganese	0.500	0.494		mg/L		99	80 - 120	
Nickel	0.500	0.494		mg/L		99	80 - 120	
Selenium	0.100	0.0901		mg/L		90	80 - 120	
Silver	0.0500	0.0458		mg/L		92	80 - 120	
Zinc	0.500	0.491	J	mg/L		98	80 - 120	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-516708/1-A
Matrix: Solid
Analysis Batch: 517104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516708

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.485	J	2.0	0.39	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Arsenic	<1.0		1.0	0.34	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Barium	<1.0		1.0	0.11	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Beryllium	<0.40		0.40	0.093	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Boron	<5.0		5.0	0.47	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Cadmium	0.123	J	0.20	0.036	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Calcium	<20		20	3.4	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Chromium	0.527	J	1.0	0.50	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Cobalt	<0.50		0.50	0.13	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Copper	0.289	J	1.0	0.28	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Iron	10.6	J	20	10	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Lead	<0.50		0.50	0.23	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Magnesium	<10		10	5.0	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Manganese	<1.0		1.0	0.15	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Nickel	<1.0		1.0	0.29	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Potassium	<50		50	18	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Silver	<0.50		0.50	0.13	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Sodium	<100		100	15	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Thallium	<1.0		1.0	0.50	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Vanadium	<0.50		0.50	0.12	mg/Kg		11/21/19 17:21	11/23/19 00:14	1
Zinc	<2.0		2.0	0.88	mg/Kg		11/21/19 17:21	11/23/19 00:14	1

Lab Sample ID: LCS 500-516708/4-A
Matrix: Solid
Analysis Batch: 517104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516708

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.0	9.50		mg/Kg		95	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	4.41		mg/Kg		88	80 - 120
Boron	100	89.6		mg/Kg		90	80 - 120
Cadmium	5.00	4.81		mg/Kg		96	80 - 120
Calcium	1000	867		mg/Kg		87	80 - 120
Chromium	20.0	19.8		mg/Kg		99	80 - 120
Cobalt	50.0	47.8		mg/Kg		96	80 - 120
Copper	25.0	25.8		mg/Kg		103	80 - 120
Iron	100	114		mg/Kg		114	80 - 120
Lead	10.0	8.99		mg/Kg		90	80 - 120
Magnesium	1000	920		mg/Kg		92	80 - 120
Manganese	50.0	46.4		mg/Kg		93	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Potassium	1000	1030		mg/Kg		103	80 - 120
Selenium	10.0	8.92		mg/Kg		89	80 - 120
Silver	5.00	4.73		mg/Kg		95	80 - 120
Sodium	1000	1070		mg/Kg		107	80 - 120
Thallium	10.0	8.81		mg/Kg		88	80 - 120
Vanadium	50.0	48.1		mg/Kg		96	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-516708/4-A
Matrix: Solid
Analysis Batch: 517104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516708
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Zinc	50.0	45.5		mg/Kg		91	80 - 120

Lab Sample ID: LB 500-515595/1-C
Matrix: Solid
Analysis Batch: 516527

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516249

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 18:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:52	11/20/19 18:40	1
Boron	<0.50		0.50	0.050	mg/L		11/19/19 15:52	11/20/19 18:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:52	11/20/19 18:40	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 18:40	1
Cobalt	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 18:40	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:52	11/20/19 18:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:52	11/20/19 18:40	1
Manganese	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 18:40	1
Nickel	0.0129	J	0.025	0.010	mg/L		11/19/19 15:52	11/20/19 18:40	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:52	11/20/19 18:40	1
Silver	<0.025		0.025	0.010	mg/L		11/19/19 15:52	11/20/19 18:40	1
Zinc	0.0373	J	0.50	0.020	mg/L		11/19/19 15:52	11/20/19 18:40	1

Lab Sample ID: 500-173293-14 MS
Matrix: Solid
Analysis Batch: 516527

Client Sample ID: 2615V2-01-B48 (0-6)
Prep Type: TCLP
Prep Batch: 516249
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.53		0.500	1.01		mg/L		96	75 - 125
Beryllium	<0.0040		0.0500	0.0515		mg/L		103	75 - 125
Boron	0.068	J	1.00	0.958		mg/L		89	75 - 125
Cadmium	<0.0050		0.0500	0.0569		mg/L		114	75 - 125
Cobalt	0.016	J	0.500	0.519		mg/L		101	75 - 125
Iron	<0.40		1.00	1.07		mg/L		107	75 - 125
Lead	<0.0075		0.100	0.0921		mg/L		92	75 - 125
Manganese	1.8		0.500	2.26		mg/L		93	75 - 125
Nickel	0.049	B	0.500	0.543		mg/L		99	75 - 125
Selenium	<0.050		0.100	0.122		mg/L		122	75 - 125
Silver	<0.025		0.0500	0.0600		mg/L		120	75 - 125
Zinc	0.13	J B	0.500	0.721		mg/L		117	75 - 125

Lab Sample ID: 500-173293-14 MS
Matrix: Solid
Analysis Batch: 516671

Client Sample ID: 2615V2-01-B48 (0-6)
Prep Type: TCLP
Prep Batch: 516249
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chromium	<0.025		0.200	0.212		mg/L		106	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173293-14 DU
Matrix: Solid
Analysis Batch: 516527

Client Sample ID: 2615V2-01-B48 (0-6)
Prep Type: TCLP
Prep Batch: 516249

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Barium	0.53		0.527		mg/L		0	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.068	J	0.0695	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	0.016	J	0.0162	J	mg/L		4	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.79		mg/L		0	20
Nickel	0.049	B	0.0513		mg/L		5	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.13	J B	0.137	J	mg/L		2	20

Lab Sample ID: 500-173293-14 DU
Matrix: Solid
Analysis Batch: 516671

Client Sample ID: 2615V2-01-B48 (0-6)
Prep Type: TCLP
Prep Batch: 516249

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Chromium	<0.025		<0.025		mg/L		NC	20

Lab Sample ID: LB 500-515591/1-B
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 516246

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		11/19/19 15:48	11/20/19 13:39	1

Lab Sample ID: 500-173293-15 MS
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: 2615V2-01-B49 (0-5)
Prep Type: SPLP East
Prep Batch: 516246

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Manganese	<0.025		0.500	0.516		mg/L		103	75 - 125

Lab Sample ID: 500-173293-15 DU
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: 2615V2-01-B49 (0-5)
Prep Type: SPLP East
Prep Batch: 516246

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Manganese	<0.025		<0.025		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-516249/2-A
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516249

Analyte	Spike	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Antimony	0.500	0.512		mg/L		102	80 - 120
Thallium	0.100	0.0996		mg/L		100	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LB 500-515595/1-C
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516249

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:52	11/20/19 15:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:52	11/20/19 15:00	1

Lab Sample ID: 500-173293-14 MS
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: 2615V2-01-B48 (0-6)
Prep Type: TCLP
Prep Batch: 516249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0060		0.500	0.521		mg/L		104	75 - 125
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125

Lab Sample ID: 500-173293-14 DU
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: 2615V2-01-B48 (0-6)
Prep Type: TCLP
Prep Batch: 516249

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-516163/12-A
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:50	1

Lab Sample ID: LCS 500-516163/13-A
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00187		mg/L		94	80 - 120

Lab Sample ID: LB 500-515595/1-B
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516163

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:53	1

Lab Sample ID: 500-173293-10 MS
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: 2615V2-01-B45 (0-4)
Prep Type: TCLP
Prep Batch: 516163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.000823		mg/L		82	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-173293-10 MSD
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: 2615V2-01-B45 (0-4)
Prep Type: TCLP
Prep Batch: 516163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.000835		mg/L		83	75 - 125	1	20

Lab Sample ID: 500-173293-10 DU
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: 2615V2-01-B45 (0-4)
Prep Type: TCLP
Prep Batch: 516163

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-515954/12-A
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/18/19 14:20	11/19/19 07:35	1

Lab Sample ID: LCS 500-515954/13-A
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.163		mg/Kg		98	80 - 120

Lab Sample ID: 500-173293-8 MS
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: 2615V2-01-B43 (0-7)
Prep Type: Total/NA
Prep Batch: 515954

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.030		0.0952	0.106		mg/Kg	☼	80	75 - 125

Lab Sample ID: 500-173293-8 MSD
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: 2615V2-01-B43 (0-7)
Prep Type: Total/NA
Prep Batch: 515954

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.030		0.0952	0.105		mg/Kg	☼	79	75 - 125	1	20

Lab Sample ID: 500-173293-8 DU
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: 2615V2-01-B43 (0-7)
Prep Type: Total/NA
Prep Batch: 515954

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.030		0.0208	F5	mg/Kg	☼	36	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Method: 9045D - pH

Lab Sample ID: 500-173293-3 DU
Matrix: Solid
Analysis Batch: 515575

Client Sample ID: 2615V2-01-B37 (0-2)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	9.2		9.2		SU		0.2	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B36 (0-4)

Lab Sample ID: 500-173293-1

Date Collected: 11/11/19 11:20

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 13:47	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 18:56	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:13	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:06	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:56	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 17:56		
					(End)	11/15/19 17:59		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B36 (0-4)

Lab Sample ID: 500-173293-1

Date Collected: 11/11/19 11:20

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 11:28	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 15:11	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 00:38	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 11:37	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 07:43	MJG	TAL CHI

Client Sample ID: 2615V2-01-B36 (4-8)

Lab Sample ID: 500-173293-2

Date Collected: 11/11/19 11:25

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:00	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B36 (4-8)

Lab Sample ID: 500-173293-2

Date Collected: 11/11/19 11:25

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:00	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:17	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:09	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:57	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575	(Start) 11/15/19 17:59 (End) 11/15/19 18:02	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B36 (4-8)

Lab Sample ID: 500-173293-2

Date Collected: 11/11/19 11:25

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 11:53	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 15:35	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 00:42	EEN	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 07:45	MJG	TAL CHI

Client Sample ID: 2615V2-01-B37 (0-2)

Lab Sample ID: 500-173293-3

Date Collected: 11/11/19 11:30

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:04	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:04	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:22	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B37 (0-2)

Lab Sample ID: 500-173293-3

Date Collected: 11/11/19 11:30

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:12	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:59	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:06		
					(End)	11/15/19 18:09		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B37 (0-2)

Lab Sample ID: 500-173293-3

Date Collected: 11/11/19 11:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 12:19	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 17:36	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 00:46	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 11:41	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 07:47	MJG	TAL CHI

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:09	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:08	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:26	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:15	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:01	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575	(Start) 11/15/19 18:12 (End) 11/15/19 18:16	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B38 (0-5)

Lab Sample ID: 500-173293-4

Date Collected: 11/11/19 11:35

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 12:44	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 18:00	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 00:50	EEN	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 07:49	MJG	TAL CHI

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Date Collected: 11/11/19 11:40

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:13	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:12	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:39	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:18	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575	(Start) 11/15/19 18:16 (End) 11/15/19 18:19	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (5-10)

Lab Sample ID: 500-173293-5

Date Collected: 11/11/19 11:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 13:10	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 14:47	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:02	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 11:45	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 07:52	MJG	TAL CHI

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:17	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:17	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:43	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:21	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:04	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575	(Start) 11/15/19 18:19 (End) 11/15/19 18:22	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 13:35	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516810	11/22/19 17:20	AJD	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B38 (10-15)

Lab Sample ID: 500-173293-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:06	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 11:49	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 07:58	MJG	TAL CHI

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:21	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:21	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:47	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:24	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:22		
					(End)	11/15/19 18:26		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 14:01	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516810	11/22/19 17:45	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:10	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 11:53	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B42 (0-7)

Lab Sample ID: 500-173293-7

Date Collected: 11/11/19 12:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:00	MJG	TAL CHI

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Date Collected: 11/11/19 12:40

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:26	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:25	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:52	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:27	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:11	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:26		
					(End)	11/15/19 18:29		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B43 (0-7)

Lab Sample ID: 500-173293-8

Date Collected: 11/11/19 12:40

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 14:52	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516810	11/22/19 18:09	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:14	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 11:57	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:02	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Date Collected: 11/11/19 12:55

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:30	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:29	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 11:56	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:36	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:12	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:29		
					(End)	11/15/19 18:33		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B44 (0-4)

Lab Sample ID: 500-173293-9

Date Collected: 11/11/19 12:55

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516539	11/21/19 13:18	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 18:24	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:18	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:01	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:11	MJG	TAL CHI

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:34	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:33	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 12:00	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:39	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:14	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575	(Start) 11/15/19 18:33 (End) 11/15/19 18:36	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B45 (0-4)

Lab Sample ID: 500-173293-10

Date Collected: 11/11/19 13:10

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 15:44	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 18:48	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:23	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:05	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:13	MJG	TAL CHI

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:39	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:46	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 12:04	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:42	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:21	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:36		
					(End)	11/15/19 18:39		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B45 (4-8)

Lab Sample ID: 500-173293-11

Date Collected: 11/11/19 13:15

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 16:09	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 19:12	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:27	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:09	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:15	MJG	TAL CHI

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:51	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:50	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 12:09	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:44	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:23	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:43		
					(End)	11/15/19 18:46		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B46 (0-4)

Lab Sample ID: 500-173293-12

Date Collected: 11/11/19 14:00

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 16:35	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516810	11/22/19 19:45	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:31	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:21	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:17	MJG	TAL CHI

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 14:56	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:54	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 12:13	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:47	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:24	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575	(Start) 11/15/19 18:46 (End) 11/15/19 18:49	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B46 (4-8)

Lab Sample ID: 500-173293-13

Date Collected: 11/11/19 14:05

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 17:00	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516810	11/22/19 20:09	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:35	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:25	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:24	MJG	TAL CHI

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:00	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 19:58	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 12:17	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 15:50	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:26	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Client Sample ID: 2615V2-01-B48 (0-6)

Lab Sample ID: 500-173293-14

Date Collected: 11/11/19 14:30

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516539	11/21/19 13:44	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 15:59	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:39	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:29	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:26	MJG	TAL CHI

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Date Collected: 11/11/19 14:45

Matrix: Solid

Date Received: 11/11/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515591	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516246	11/19/19 15:48	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:04	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516527	11/20/19 20:15	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	516671	11/21/19 12:43	EEN	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516249	11/19/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:02	FXG	TAL CHI
TCLP	Leach	1311			515595	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516163	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 09:39	MJG	TAL CHI
Total/NA	Analysis	9045D		1	515575		SMO	TAL CHI
					(Start)	11/15/19 18:53		
					(End)	11/15/19 18:56		
Total/NA	Analysis	Moisture		1	515358	11/14/19 11:46	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Client Sample ID: 2615V2-01-B49 (0-5)

Lab Sample ID: 500-173293-15

Date Collected: 11/11/19 14:45

Matrix: Solid

Date Received: 11/11/19 16:00

Percent Solids: 85.5

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	5035			515456	11/11/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516317	11/20/19 17:51	PMF	TAL CHI
Total/NA	Prep	3541			516260	11/19/19 16:34	ACK	TAL CHI
Total/NA	Analysis	8270D		1	516982	11/23/19 16:23	AJD	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517104	11/23/19 01:51	EEN	TAL CHI
Total/NA	Prep	3050B			516708	11/21/19 17:21	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517235	11/25/19 12:33	JEF	TAL CHI
Total/NA	Prep	7471B			515954	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:28	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173293-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: D. Tiebout
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____



Chain of Custody Record

Lab Job #: 500-173283
 Chain of Custody Number: _____
 Page 1 of 2
 Temperature °C of Cooler: 45, 5.9

48 pt.

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key
Project Name		Lab Project #		Parameter		Matrix		Matrix		
Project Location/State		Lab Project #		Parameter		Matrix		Matrix		Comments
Sampler		Lab PM		Parameter		Matrix		Matrix		
Lab ID	MS/MSD	Sample ID	Sampling Date	Time	# of Containers	Matrix	Matrix	Matrix	Matrix	Comments
1		2615V2-01-B36(0-4)	11/11/19	1120	2	S	X	X	X	
2		2615V2-01-B36(4-8)	11/11/19	1125	2	S	X	X	X	
3		2615V2-01-B37(0-2)	11/11/19	1130	2	S	X	X	X	
4		2615V2-01-B38(0-5)	11/11/19	1135	2	S	X	X	X	
5		2615V2-01-B38(5-10)	11/11/19	1140	2	S	X	X	X	
6		2615V2-01-B38(10-15)	11/11/19	1145	2	S	X	X	X	
7		2615V2-01-B42(0-7)	11/11/19	1230	2	S	X	X	X	
8		2615V2-01-B43(0-7)	11/11/19	1240	2	S	X	X	X	
9		2615V2-01-B44(0-4)	11/11/19	1255	2	S	X	X	X	
10		2615V2-01-B45(0-4)	11/11/19	1310	2	S	X	X	X	

- Preservative Key
- HCL, Cool to 4°
 - H2SO4, Cool to 4°
 - HNO3, Cool to 4°
 - NaOH, Cool to 4°
 - NaOH/Zn, Cool to 4°
 - NaHSO4
 - Cool to 4°
 - None
 - Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>ENE</u> Date: <u>11/11/19</u> Time: <u>1510</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/11/19</u> Time: <u>1510</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/11/19</u> Time: <u>1600</u>	Received By: <u>[Signature]</u> Company: <u>TA-ERT</u> Date: <u>11/11/19</u> Time: <u>1600</u>
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: D. TIEBOUT
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-173293
 Chain of Custody Number: _____
 Page 2 of 2
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
<u>ENE</u>		<u>1009341.0447.01</u>									
Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
<u>176-001-0478</u>											
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
<u>CHICAGO, IL</u>		<u>R. WRIGHT</u>									
Sampler		Sample ID		Date		Time		# of Containers		Matrix	
<u>A. HAPPEL</u>											
<u>11</u>	<u>MS/MSD</u>	<u>2615V2-01-B45(4-8)</u>	<u>11/11/19</u>	<u>1315</u>	<u>2</u>	<u>5</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	
<u>12</u>		<u>2615V2-01-B46(0-4)</u>	<u>11/11/19</u>	<u>1400</u>	<u>2</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>13</u>		<u>2615V2-01-B46(4-8)</u>	<u>11/11/19</u>	<u>1405</u>	<u>2</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>14</u>		<u>2615V2-01-B48(0-4)</u>	<u>11/11/19</u>	<u>1430</u>	<u>2</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>15</u>		<u>2615V2-01-B49(0-5)</u>	<u>11/11/19</u>	<u>1445</u>	<u>2</u>	<u>5</u>	<u>Y</u>	<u>X</u>	<u>X</u>	<u>X</u>	

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company <u>K+E</u>	Date <u>11/11/19</u>	Time <u>1510</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11/11/19</u>	Time <u>1570</u>
Relinquished By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11/11/19</u>	Time <u>1600</u>	Received By <u>[Signature]</u>	Company <u>TA-ERT</u>	Date <u>11/11/19</u>	Time <u>1600</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WJ - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173293-1

Login Number: 173293

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5,5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173369-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
11/26/2019 2:34:21 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com
Designee for
Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Job ID: 500-173369-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173369-1

Receipt

The samples were received on 11/12/2019 4:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.8° C and 6.2° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 516409 had 1 analyte outside control limits: 2,2'-oxybis[1-chloropropane]. These results have been reported and qualified. (LCS 500-516409/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The interference check standard solution (ICSAB) associated with Analytical batch 500-516528 had results for Silver above the reporting limit (RL). Associated samples 2615V2-01-B22 (0-7) (500-173369-1), 2615V2-01-B30 (0-6) (500-173369-2), 2615V2-01-B30 (6-12) (500-173369-3), 2615V2-01-B30 (12-18) (500-173369-4), 2615V2-01-B30 (12-18)D (500-173369-5), 2615V2-01-B51 (0-5) (500-173369-6), 2615V2-01-B51 (5-10) (500-173369-7), 2615V2-01-B51 (10-15) (500-173369-8), 2615V2-01-B51 (15-20) (500-173369-9), 2615V2-A1-B25 (0-5) (500-173369-10), 2615V2-A1-B25 (5-10) (500-173369-11) and 2615V2-A1-B25 (10-15) (500-173369-12) were non-detects for Silver, therefore the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.017		0.016	0.0069	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00062	J	0.0031	0.00050	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.033	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.015	J	0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.031	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.033	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.39	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.4		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	64000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	15		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	35		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	27000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	870		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.65		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.31	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.065		0.039	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.046	J	0.078	0.0072	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.027	J	0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.032	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.27		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.040		0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.16		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.18		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.079		0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (0-6) (Continued)

Lab Sample ID: 500-173369-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.10		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.072		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.057		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.071		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.026	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.027	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.85		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	34000		12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	35		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.60	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.92		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.29	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.083		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.27	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.099		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.055	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.039	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.60	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.9		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.088	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (6-12) (Continued)

Lab Sample ID: 500-173369-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	98000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.9		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	8.0		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	43000		59	29	mg/Kg	10	☼	6010B	Total/NA
Manganese	260		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2300		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.54	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.050		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.31	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.061		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.052	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	15		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	61000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	39		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.44	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		61	9.1	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18) (Continued)

Lab Sample ID: 500-173369-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.84		0.61	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.31	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.020	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.31	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.026		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.049	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.72		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	16		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.64		0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.038		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.020	0.0085	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.056	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.030	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.040		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.40	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.4		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	34		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	1900		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.097	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.056		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.23	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.91		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0074	J	0.016	0.0069	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.063	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.14		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.027	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.032	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.31	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	14		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		120	21	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (5-10) (Continued)

Lab Sample ID: 500-173369-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	16		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	37		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	1700		61	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.93		0.61	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.17	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.18		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.033		0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0094	J	0.020	0.0088	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.064	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.18		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.037	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.57	J	1.3	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.9		0.63	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.63	0.072	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.25	0.059	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.13	0.023	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		130	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	35		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		13	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.3	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.63	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.55	J	0.63	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Sodium	490		63	9.3	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (10-15) (Continued)

Lab Sample ID: 500-173369-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.83		0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.31	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.3	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.026	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.040		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0095	J	0.018	0.0080	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.070	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.030	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.32	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.8	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.28	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		28	10	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.84		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.32	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0079	J	0.016	0.0069	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.053	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.013	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.030	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.032	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.2		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	41		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.71		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	830		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.061		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.24	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.034		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.052	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.46	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.7		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	16		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (5-10) (Continued)

Lab Sample ID: 500-173369-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	57000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.62	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		31	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	280		62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.035		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.025		0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.039	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.025	J	0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.47	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	15		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	73000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	15		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	240		62	9.1	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (10-15) (Continued)

Lab Sample ID: 500-173369-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.86		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0	F1	0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173369-1	2615V2-01-B22 (0-7)	Solid	11/12/19 10:45	11/12/19 16:20	
500-173369-2	2615V2-01-B30 (0-6)	Solid	11/12/19 11:45	11/12/19 16:20	
500-173369-3	2615V2-01-B30 (6-12)	Solid	11/12/19 11:50	11/12/19 16:20	
500-173369-4	2615V2-01-B30 (12-18)	Solid	11/12/19 11:55	11/12/19 16:20	
500-173369-5	2615V2-01-B30 (12-18)D	Solid	11/12/19 11:55	11/12/19 16:20	
500-173369-6	2615V2-01-B51 (0-5)	Solid	11/12/19 12:30	11/12/19 16:20	
500-173369-7	2615V2-01-B51 (5-10)	Solid	11/12/19 12:35	11/12/19 16:20	
500-173369-8	2615V2-01-B51 (10-15)	Solid	11/12/19 12:40	11/12/19 16:20	
500-173369-9	2615V2-01-B51 (15-20)	Solid	11/12/19 12:45	11/12/19 16:20	
500-173369-10	2615V2-A1-B25 (0-5)	Solid	11/12/19 14:30	11/12/19 16:20	
500-173369-11	2615V2-A1-B25 (5-10)	Solid	11/12/19 14:35	11/12/19 16:20	
500-173369-12	2615V2-A1-B25 (10-15)	Solid	11/12/19 14:40	11/12/19 16:20	



Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Date Collected: 11/12/19 10:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.017		0.016	0.0069	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1
Xylenes, Total	0.00062	J	0.0031	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 12:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	11/12/19 16:52	11/20/19 12:53	1
Dibromofluoromethane	89		75 - 126	11/12/19 16:52	11/20/19 12:53	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/12/19 16:52	11/20/19 12:53	1
Toluene-d8 (Surr)	95		75 - 124	11/12/19 16:52	11/20/19 12:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Date Collected: 11/12/19 10:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2-Methylnaphthalene	0.033	J	0.080	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Phenanthrene	0.13		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Fluoranthene	0.015	J	0.039	0.0074	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Pyrene	0.031	J	0.039	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Date Collected: 11/12/19 10:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.033	J	0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Benzo[g,h,i]perylene	0.014	J	0.039	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 12:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		31 - 166				11/20/19 10:21	11/25/19 12:28	1
Phenol-d5	64		30 - 153				11/20/19 10:21	11/25/19 12:28	1
Nitrobenzene-d5	64		37 - 147				11/20/19 10:21	11/25/19 12:28	1
2-Fluorobiphenyl	74		43 - 145				11/20/19 10:21	11/25/19 12:28	1
2,4,6-Tribromophenol	73		31 - 143				11/20/19 10:21	11/25/19 12:28	1
Terphenyl-d14	93		42 - 157				11/20/19 10:21	11/25/19 12:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.2	0.23	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Arsenic	7.4		0.59	0.20	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Barium	40		0.59	0.067	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Beryllium	0.59		0.23	0.055	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Boron	14		2.9	0.27	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Cadmium	0.11	J B	0.12	0.021	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Calcium	64000		120	20	mg/Kg	☼	11/21/19 17:31	11/25/19 11:51	10
Chromium	15		0.59	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Cobalt	13		0.29	0.077	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Copper	35		0.59	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Iron	19000		12	6.1	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Lead	14		0.29	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Magnesium	27000		5.9	2.9	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Manganese	360		0.59	0.085	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Nickel	33		0.59	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Potassium	2500		29	10	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Silver	2.0		0.29	0.076	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Sodium	870		59	8.7	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Thallium	0.65		0.59	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Vanadium	17		0.29	0.069	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1
Zinc	48		1.2	0.51	mg/Kg	☼	11/21/19 17:31	11/22/19 16:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:35	1
Boron	0.10	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Date Collected: 11/12/19 10:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 83.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:35	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:35	1
Cobalt	0.020	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:35	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:35	1
Manganese	2.0		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:35	1
Nickel	0.055		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:35	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:35	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:35	1
Zinc	0.31	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:35	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.24		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 15:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 07:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0065	mg/Kg	☼	11/18/19 14:20	11/19/19 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/18/19 15:27	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	11/12/19 16:52	11/20/19 13:18	1
Dibromofluoromethane	89		75 - 126	11/12/19 16:52	11/20/19 13:18	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/12/19 16:52	11/20/19 13:18	1
Toluene-d8 (Surr)	97		75 - 124	11/12/19 16:52	11/20/19 13:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.086	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Naphthalene	0.065		0.039	0.0060	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2-Methylnaphthalene	0.046	J	0.078	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Acenaphthene	0.027	J	0.039	0.0070	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Fluorene	0.032	J	0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Phenanthrene	0.27		0.039	0.0054	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Anthracene	0.040		0.039	0.0065	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Fluoranthene	0.16		0.039	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Pyrene	0.18		0.039	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Benzo[a]anthracene	0.079		0.039	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.10		0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Benzo[b]fluoranthene	0.072		0.039	0.0084	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Benzo[k]fluoranthene	0.057		0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Benzo[a]pyrene	0.071		0.039	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Indeno[1,2,3-cd]pyrene	0.026	J	0.039	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Benzo[g,h,i]perylene	0.027	J	0.039	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 12:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166				11/20/19 10:21	11/25/19 12:51	1
Phenol-d5	66		30 - 153				11/20/19 10:21	11/25/19 12:51	1
Nitrobenzene-d5	68		37 - 147				11/20/19 10:21	11/25/19 12:51	1
2-Fluorobiphenyl	64		43 - 145				11/20/19 10:21	11/25/19 12:51	1
2,4,6-Tribromophenol	64		31 - 143				11/20/19 10:21	11/25/19 12:51	1
Terphenyl-d14	93		42 - 157				11/20/19 10:21	11/25/19 12:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.2	0.23	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Arsenic	8.1		0.60	0.21	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Barium	47		0.60	0.069	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Beryllium	0.85		0.24	0.056	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Boron	17		3.0	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Cadmium	0.14	B	0.12	0.022	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Calcium	34000		12	2.0	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Chromium	18		0.60	0.30	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Cobalt	15		0.30	0.079	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Copper	35		0.60	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Iron	20000		12	6.3	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Lead	23		0.30	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Magnesium	20000		6.0	3.0	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Manganese	310		0.60	0.088	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Nickel	39		0.60	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Potassium	3200		30	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Selenium	0.37	J	0.60	0.35	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Silver	2.5		0.30	0.078	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Sodium	210		60	8.9	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Thallium	0.92		0.60	0.30	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Vanadium	20		0.30	0.071	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1
Zinc	57		1.2	0.53	mg/Kg	☼	11/21/19 17:31	11/22/19 17:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.30	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:39	1
Boron	0.10	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:39	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:39	1
Cobalt	0.038		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:39	1
Iron	0.29	J	0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:39	1
Manganese	2.5		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:39	1
Nickel	0.083		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:39	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:39	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:39	1
Zinc	0.27	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:39	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.099		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 15:43	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:23	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 07:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.0063	mg/Kg	☼	11/18/19 14:20	11/19/19 08:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3		0.2	0.2	SU			11/18/19 15:35	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Date Collected: 11/12/19 11:50

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	11/12/19 16:52	11/20/19 13:44	1
Dibromofluoromethane	89		75 - 126	11/12/19 16:52	11/20/19 13:44	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/12/19 16:52	11/20/19 13:44	1
Toluene-d8 (Surr)	94		75 - 124	11/12/19 16:52	11/20/19 13:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Date Collected: 11/12/19 11:50

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2-Methylnaphthalene	0.055	J	0.081	0.0074	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Phenanthrene	0.17		0.040	0.0056	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Date Collected: 11/12/19 11:50

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.039	J	0.040	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 14:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				11/20/19 10:21	11/25/19 14:00	1
Phenol-d5	65		30 - 153				11/20/19 10:21	11/25/19 14:00	1
Nitrobenzene-d5	65		37 - 147				11/20/19 10:21	11/25/19 14:00	1
2-Fluorobiphenyl	77		43 - 145				11/20/19 10:21	11/25/19 14:00	1
2,4,6-Tribromophenol	78		31 - 143				11/20/19 10:21	11/25/19 14:00	1
Terphenyl-d14	114		42 - 157				11/20/19 10:21	11/25/19 14:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	1.2	0.23	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Arsenic	4.9		0.59	0.20	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Barium	33		0.59	0.067	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Beryllium	0.49		0.23	0.055	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Boron	14		2.9	0.27	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Cadmium	0.088	J B	0.12	0.021	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Calcium	98000		120	20	mg/Kg	☼	11/21/19 17:31	11/25/19 11:55	10
Chromium	14		0.59	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Cobalt	7.9		0.29	0.077	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Copper	18		0.59	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Iron	14000		12	6.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Lead	8.0		0.29	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Magnesium	43000		59	29	mg/Kg	☼	11/21/19 17:31	11/25/19 11:55	10
Manganese	260		0.59	0.085	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Nickel	20		0.59	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Potassium	2300		29	10	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Selenium	0.37	J	0.59	0.34	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Silver	2.1		0.29	0.076	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Sodium	190		59	8.7	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Thallium	0.54	J	0.59	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Vanadium	16		0.29	0.069	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1
Zinc	34		1.2	0.51	mg/Kg	☼	11/21/19 17:31	11/22/19 17:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:43	1
Boron	0.099	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Date Collected: 11/12/19 11:50

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:43	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:43	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:43	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:43	1
Manganese	2.3		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:43	1
Nickel	0.050		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:43	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:43	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:43	1
Zinc	0.31	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:43	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.061		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 15:47	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 07:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.018	0.0060	mg/Kg	☼	11/18/19 14:20	11/19/19 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.2		0.2	0.2	SU			11/18/19 15:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.026		0.026	0.011	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Benzene	<0.0026		0.0026	0.00067	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Bromodichloromethane	<0.0026		0.0026	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Bromoform	<0.0026		0.0026	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Bromomethane	<0.0065		0.0065	0.0025	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
2-Butanone (MEK)	<0.0065		0.0065	0.0029	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Carbon disulfide	<0.0065		0.0065	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Carbon tetrachloride	<0.0026		0.0026	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Chlorobenzene	<0.0026		0.0026	0.00096	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Chloroethane	<0.0065		0.0065	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Chloroform	<0.0026		0.0026	0.00091	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Chloromethane	<0.0065		0.0065	0.0026	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
cis-1,2-Dichloroethene	<0.0026		0.0026	0.00073	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
cis-1,3-Dichloropropene	<0.0026		0.0026	0.00079	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Dibromochloromethane	<0.0026		0.0026	0.00085	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,1-Dichloroethane	<0.0026		0.0026	0.00089	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,2-Dichloroethane	<0.0065		0.0065	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,1-Dichloroethene	<0.0026		0.0026	0.00090	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,2-Dichloropropane	<0.0026		0.0026	0.00067	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,3-Dichloropropane, Total	<0.0026		0.0026	0.00092	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Ethylbenzene	<0.0026		0.0026	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
2-Hexanone	<0.0065		0.0065	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Methylene Chloride	<0.0065		0.0065	0.0026	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
4-Methyl-2-pentanone (MIBK)	<0.0065		0.0065	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Methyl tert-butyl ether	<0.0026		0.0026	0.00077	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Styrene	<0.0026		0.0026	0.00079	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,1,2,2-Tetrachloroethane	<0.0026		0.0026	0.00083	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Tetrachloroethene	<0.0026		0.0026	0.00089	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Toluene	<0.0026		0.0026	0.00066	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
trans-1,2-Dichloroethene	<0.0026		0.0026	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
trans-1,3-Dichloropropene	<0.0026		0.0026	0.00092	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,1,1-Trichloroethane	<0.0026		0.0026	0.00088	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
1,1,2-Trichloroethane	<0.0026		0.0026	0.0011	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Trichloroethene	<0.0026		0.0026	0.00088	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Vinyl acetate	<0.0065		0.0065	0.0023	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Vinyl chloride	<0.0026		0.0026	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1
Xylenes, Total	<0.0052		0.0052	0.00084	mg/Kg	☼	11/12/19 16:52	11/20/19 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131	11/12/19 16:52	11/20/19 14:09	1
Dibromofluoromethane	90		75 - 126	11/12/19 16:52	11/20/19 14:09	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/12/19 16:52	11/20/19 14:09	1
Toluene-d8 (Surr)	95		75 - 124	11/12/19 16:52	11/20/19 14:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.091	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2-Methylnaphthalene	0.052	J	0.082	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Phenanthrene	0.13		0.040	0.0057	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Pyrene	0.023	J	0.040	0.0081	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 14:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	45		31 - 166				11/20/19 10:21	11/25/19 14:22	1
Phenol-d5	50		30 - 153				11/20/19 10:21	11/25/19 14:22	1
Nitrobenzene-d5	50		37 - 147				11/20/19 10:21	11/25/19 14:22	1
2-Fluorobiphenyl	69		43 - 145				11/20/19 10:21	11/25/19 14:22	1
2,4,6-Tribromophenol	63		31 - 143				11/20/19 10:21	11/25/19 14:22	1
Terphenyl-d14	113		42 - 157				11/20/19 10:21	11/25/19 14:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.2	0.24	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Arsenic	7.8		0.61	0.21	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Barium	37		0.61	0.070	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Beryllium	0.64		0.24	0.057	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Boron	15		3.1	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Cadmium	0.10	J B	0.12	0.022	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Calcium	61000		120	21	mg/Kg	☼	11/21/19 17:31	11/25/19 12:00	10
Chromium	16		0.61	0.30	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Cobalt	14		0.31	0.080	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Copper	39		0.61	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Iron	20000		12	6.4	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Lead	14		0.31	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Magnesium	25000		6.1	3.0	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Manganese	360		0.61	0.089	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Nickel	35		0.61	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Potassium	2700		31	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Selenium	0.44	J	0.61	0.36	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Silver	2.2		0.31	0.079	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Sodium	180		61	9.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Thallium	0.84		0.61	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Vanadium	18		0.31	0.072	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1
Zinc	48		1.2	0.54	mg/Kg	☼	11/21/19 17:31	11/22/19 17:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:47	1
Boron	0.14	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:47	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:47	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:47	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:47	1
Manganese	2.0		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:47	1
Nickel	0.040		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:47	1
Selenium	0.020	J	0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:47	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:47	1
Zinc	0.31	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.026		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 15:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 07:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0062	mg/Kg	☼	11/18/19 14:20	11/19/19 08:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3		0.2	0.2	SU			11/18/19 15:43	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	11/12/19 16:52	11/20/19 14:35	1
Dibromofluoromethane	88		75 - 126	11/12/19 16:52	11/20/19 14:35	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/12/19 16:52	11/20/19 14:35	1
Toluene-d8 (Surr)	95		75 - 124	11/12/19 16:52	11/20/19 14:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2-Methylnaphthalene	0.049	J	0.080	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Phenanthrene	0.12		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Pyrene	0.020	J	0.039	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	52		31 - 166	11/20/19 10:21	11/25/19 14:45	1
Phenol-d5	52		30 - 153	11/20/19 10:21	11/25/19 14:45	1
Nitrobenzene-d5	52		37 - 147	11/20/19 10:21	11/25/19 14:45	1
2-Fluorobiphenyl	65		43 - 145	11/20/19 10:21	11/25/19 14:45	1
2,4,6-Tribromophenol	53		31 - 143	11/20/19 10:21	11/25/19 14:45	1
Terphenyl-d14	93		42 - 157	11/20/19 10:21	11/25/19 14:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.2	0.24	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Arsenic	7.3		0.62	0.21	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Barium	39		0.62	0.070	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Beryllium	0.72		0.25	0.058	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Boron	16		3.1	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Cadmium	0.12	B	0.12	0.022	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Calcium	58000		120	21	mg/Kg	☼	11/21/19 17:31	11/25/19 12:04	10
Chromium	17		0.62	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Cobalt	14		0.31	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Copper	29		0.62	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Iron	20000		12	6.4	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Lead	13		0.31	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Manganese	320		0.62	0.090	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Nickel	36		0.62	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Potassium	2900		31	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Selenium	0.64		0.62	0.36	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Silver	2.4		0.31	0.080	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Sodium	190		62	9.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Thallium	1.0		0.62	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Vanadium	19		0.31	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1
Zinc	49		1.2	0.54	mg/Kg	☼	11/21/19 17:31	11/22/19 17:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:52	1
Boron	0.13	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:52	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:52	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:52	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:52	1
Manganese	2.0		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:52	1
Nickel	0.040		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:52	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:52	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:52	1
Zinc	0.15	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.038		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 15:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0066	mg/Kg	☼	11/18/19 14:20	11/19/19 08:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			11/18/19 15:47	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Date Collected: 11/12/19 12:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.013	J	0.020	0.0085	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	11/12/19 16:52	11/20/19 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		75 - 131	11/12/19 16:52	11/20/19 15:01	1
Dibromofluoromethane	88		75 - 126	11/12/19 16:52	11/20/19 15:01	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/12/19 16:52	11/20/19 15:01	1
Toluene-d8 (Surr)	94		75 - 124	11/12/19 16:52	11/20/19 15:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Date Collected: 11/12/19 12:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2-Methylnaphthalene	0.056	J	0.079	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Phenanthrene	0.15		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Pyrene	0.030	J	0.039	0.0078	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Date Collected: 11/12/19 12:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.040		0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	58		31 - 166				11/20/19 10:21	11/25/19 15:08	1
Phenol-d5	63		30 - 153				11/20/19 10:21	11/25/19 15:08	1
Nitrobenzene-d5	59		37 - 147				11/20/19 10:21	11/25/19 15:08	1
2-Fluorobiphenyl	73		43 - 145				11/20/19 10:21	11/25/19 15:08	1
2,4,6-Tribromophenol	73		31 - 143				11/20/19 10:21	11/25/19 15:08	1
Terphenyl-d14	109		42 - 157				11/20/19 10:21	11/25/19 15:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	J	1.1	0.22	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Arsenic	8.4		0.56	0.19	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Barium	39		0.56	0.064	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Beryllium	0.65		0.22	0.052	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Boron	14		2.8	0.26	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Cadmium	0.15	B	0.11	0.020	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Calcium	55000		110	19	mg/Kg	☼	11/21/19 17:31	11/25/19 12:08	10
Chromium	16		0.56	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Cobalt	15		0.28	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Copper	34		0.56	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Iron	20000		11	5.8	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Lead	15		0.28	0.13	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Magnesium	23000		5.6	2.8	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Manganese	320		0.56	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Nickel	38		0.56	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Potassium	2800		28	9.9	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Silver	2.3		0.28	0.072	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Sodium	1900		56	8.3	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Thallium	1.1		0.56	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Vanadium	18		0.28	0.066	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1
Zinc	57		1.1	0.49	mg/Kg	☼	11/21/19 17:31	11/22/19 17:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:56	1
Boron	0.097	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Date Collected: 11/12/19 12:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:56	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:56	1
Cobalt	0.022	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:56	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:56	1
Manganese	2.0		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:56	1
Nickel	0.056		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:56	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:56	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:56	1
Zinc	0.23	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:56	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.91		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:00	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0064	mg/Kg	☼	11/18/19 14:20	11/19/19 08:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			11/18/19 15:51	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0074	J	0.016	0.0069	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	11/12/19 16:52	11/20/19 15:26	1
Dibromofluoromethane	89		75 - 126	11/12/19 16:52	11/20/19 15:26	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/12/19 16:52	11/20/19 15:26	1
Toluene-d8 (Surr)	96		75 - 124	11/12/19 16:52	11/20/19 15:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2-Methylnaphthalene	0.063	J	0.080	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Phenanthrene	0.14		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Pyrene	0.027	J	0.039	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.032	J	0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 15:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				11/20/19 10:21	11/25/19 15:31	1
Phenol-d5	62		30 - 153				11/20/19 10:21	11/25/19 15:31	1
Nitrobenzene-d5	59		37 - 147				11/20/19 10:21	11/25/19 15:31	1
2-Fluorobiphenyl	72		43 - 145				11/20/19 10:21	11/25/19 15:31	1
2,4,6-Tribromophenol	61		31 - 143				11/20/19 10:21	11/25/19 15:31	1
Terphenyl-d14	106		42 - 157				11/20/19 10:21	11/25/19 15:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	1.2	0.24	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Arsenic	7.5		0.61	0.21	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Barium	36		0.61	0.070	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Beryllium	0.66		0.25	0.057	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Boron	14		3.1	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Cadmium	0.12	B	0.12	0.022	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Calcium	57000		120	21	mg/Kg	☼	11/21/19 17:31	11/25/19 12:12	10
Chromium	16		0.61	0.30	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Cobalt	14		0.31	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Copper	37		0.61	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Iron	19000		12	6.4	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Lead	13		0.31	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Magnesium	23000		6.1	3.0	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Manganese	330		0.61	0.089	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Nickel	36		0.61	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Potassium	2700		31	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Selenium	0.45	J	0.61	0.36	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Silver	2.3		0.31	0.079	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Sodium	1700		61	9.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Thallium	0.93		0.61	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Vanadium	18		0.31	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1
Zinc	52		1.2	0.54	mg/Kg	☼	11/21/19 17:31	11/22/19 17:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 11:00	1
Boron	0.12	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 11:00	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:00	1
Cobalt	0.012	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:00	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 11:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 11:00	1
Manganese	2.0		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:00	1
Nickel	0.034		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:00	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 11:00	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:00	1
Zinc	0.17	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 11:00	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.18		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:04	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.020	0.0068	mg/Kg	☼	11/18/19 14:20	11/19/19 08:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/18/19 15:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0094	J	0.020	0.0088	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
2-Butanone (MEK)	<0.0051		0.0051	0.0022	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,2-Dichloropropene	<0.0020		0.0020	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1
Xylenes, Total	<0.0040		0.0040	0.00065	mg/Kg	☼	11/12/19 16:52	11/20/19 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 131	11/12/19 16:52	11/20/19 18:51	1
Dibromofluoromethane	89		75 - 126	11/12/19 16:52	11/20/19 18:51	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/12/19 16:52	11/20/19 18:51	1
Toluene-d8 (Surr)	94		75 - 124	11/12/19 16:52	11/20/19 18:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2-Methylnaphthalene	0.064	J	0.079	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Phenanthrene	0.18		0.039	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.037	J	0.039	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 15:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	52		31 - 166				11/20/19 10:21	11/25/19 15:54	1
Phenol-d5	59		30 - 153				11/20/19 10:21	11/25/19 15:54	1
Nitrobenzene-d5	58		37 - 147				11/20/19 10:21	11/25/19 15:54	1
2-Fluorobiphenyl	68		43 - 145				11/20/19 10:21	11/25/19 15:54	1
2,4,6-Tribromophenol	62		31 - 143				11/20/19 10:21	11/25/19 15:54	1
Terphenyl-d14	111		42 - 157				11/20/19 10:21	11/25/19 15:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J	1.3	0.24	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Arsenic	8.9		0.63	0.22	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Barium	37		0.63	0.072	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Beryllium	0.70		0.25	0.059	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Boron	17		3.1	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Cadmium	0.10	J B	0.13	0.023	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Calcium	53000		130	21	mg/Kg	☼	11/21/19 17:31	11/25/19 12:16	10
Chromium	16		0.63	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Cobalt	15		0.31	0.082	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Copper	35		0.63	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Iron	21000		13	6.5	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Lead	16		0.31	0.15	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Magnesium	22000		6.3	3.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Manganese	320		0.63	0.091	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Nickel	39		0.63	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Potassium	3000		31	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Selenium	0.55	J	0.63	0.37	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Silver	2.4		0.31	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Sodium	490		63	9.3	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Thallium	0.83		0.63	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Vanadium	19		0.31	0.074	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1
Zinc	54		1.3	0.55	mg/Kg	☼	11/21/19 17:31	11/22/19 17:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 11:05	1
Boron	0.15	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 11:05	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:05	1
Cobalt	0.011	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:05	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 11:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 11:05	1
Manganese	1.8		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:05	1
Nickel	0.030		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:05	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 11:05	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:05	1
Zinc	0.026	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 11:05	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.040		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:08	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:41	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0068	mg/Kg	☼	11/18/19 14:20	11/19/19 09:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/18/19 15:59	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Date Collected: 11/12/19 12:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0095	J	0.018	0.0080	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Carbon tetrachloride	<0.0018		0.0018	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,1-Dichloroethene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 131	11/12/19 16:52	11/20/19 19:17	1
Dibromofluoromethane	91		75 - 126	11/12/19 16:52	11/20/19 19:17	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/12/19 16:52	11/20/19 19:17	1
Toluene-d8 (Surr)	94		75 - 124	11/12/19 16:52	11/20/19 19:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Date Collected: 11/12/19 12:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2-Methylnaphthalene	0.070	J	0.083	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Phenanthrene	0.15		0.041	0.0057	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Date Collected: 11/12/19 12:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.030	J	0.041	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/20/19 10:21	11/25/19 16:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	50		31 - 166				11/20/19 10:21	11/25/19 16:17	1
Phenol-d5	59		30 - 153				11/20/19 10:21	11/25/19 16:17	1
Nitrobenzene-d5	52		37 - 147				11/20/19 10:21	11/25/19 16:17	1
2-Fluorobiphenyl	67		43 - 145				11/20/19 10:21	11/25/19 16:17	1
2,4,6-Tribromophenol	49		31 - 143				11/20/19 10:21	11/25/19 16:17	1
Terphenyl-d14	99		42 - 157				11/20/19 10:21	11/25/19 16:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.1	0.22	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Arsenic	7.8		0.57	0.19	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Barium	37		0.57	0.065	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Beryllium	0.61		0.23	0.053	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Boron	16		2.8	0.27	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Cadmium	0.13	B	0.11	0.020	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Calcium	54000		110	19	mg/Kg	☼	11/21/19 17:31	11/25/19 12:21	10
Chromium	16		0.57	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Cobalt	14		0.28	0.075	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Copper	30		0.57	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Iron	19000		11	5.9	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Lead	14		0.28	0.13	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Magnesium	22000		5.7	2.8	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Manganese	320		0.57	0.083	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Nickel	36		0.57	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Potassium	2900		28	10	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Silver	2.3		0.28	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Sodium	210		57	8.4	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Thallium	0.84		0.57	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Vanadium	19		0.28	0.067	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1
Zinc	62		1.1	0.50	mg/Kg	☼	11/21/19 17:31	11/22/19 17:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 11:17	1
Boron	0.14	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Date Collected: 11/12/19 12:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 11:17	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:17	1
Cobalt	0.011	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:17	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 11:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 11:17	1
Manganese	2.1		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:17	1
Nickel	0.031		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:17	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 11:17	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:17	1
Zinc	0.32	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 11:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.15		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0064	mg/Kg	☼	11/18/19 14:20	11/19/19 09:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/18/19 16:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0079	J	0.016	0.0069	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 19:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 131	11/12/19 16:52	11/20/19 19:42	1
Dibromofluoromethane	92		75 - 126	11/12/19 16:52	11/20/19 19:42	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/12/19 16:52	11/20/19 19:42	1
Toluene-d8 (Surr)	94		75 - 124	11/12/19 16:52	11/20/19 19:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2-Methylnaphthalene	0.053	J	0.076	0.0069	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Phenanthrene	0.11		0.037	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Fluoranthene	0.013	J	0.037	0.0070	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Pyrene	0.030	J	0.037	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Benzof[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.032	J	0.037	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 16:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	56		31 - 166				11/20/19 10:21	11/25/19 16:40	1
Phenol-d5	60		30 - 153				11/20/19 10:21	11/25/19 16:40	1
Nitrobenzene-d5	58		37 - 147				11/20/19 10:21	11/25/19 16:40	1
2-Fluorobiphenyl	69		43 - 145				11/20/19 10:21	11/25/19 16:40	1
2,4,6-Tribromophenol	66		31 - 143				11/20/19 10:21	11/25/19 16:40	1
Terphenyl-d14	110		42 - 157				11/20/19 10:21	11/25/19 16:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.1	0.22	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Arsenic	8.2		0.56	0.19	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Barium	33		0.56	0.064	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Beryllium	0.69		0.22	0.052	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Boron	15		2.8	0.26	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Cadmium	0.13	B	0.11	0.020	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Calcium	59000		110	19	mg/Kg	☼	11/21/19 17:31	11/25/19 12:25	10
Chromium	15		0.56	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Cobalt	15		0.28	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Copper	41		0.56	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Iron	19000		11	5.8	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Lead	22		0.28	0.13	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Magnesium	25000		5.6	2.8	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Manganese	380		0.56	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Nickel	38		0.56	0.16	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Potassium	2800		28	9.9	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Selenium	0.71		0.56	0.33	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Silver	2.3		0.28	0.072	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Sodium	830		56	8.3	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Thallium	1.2		0.56	0.28	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Vanadium	17		0.28	0.066	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1
Zinc	51		1.1	0.49	mg/Kg	☼	11/21/19 17:31	11/22/19 17:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 11:22	1
Boron	0.11	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 84.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 11:22	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:22	1
Cobalt	0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:22	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 11:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 11:22	1
Manganese	2.2		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:22	1
Nickel	0.061		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:22	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 11:22	1
Silver	<0.025 ^		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:22	1
Zinc	0.24	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 11:22	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.034		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:52	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.018	0.0060	mg/Kg	☼	11/18/19 14:20	11/19/19 09:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/18/19 16:11	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Date Collected: 11/12/19 14:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,2-Dichloropropene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131	11/12/19 16:52	11/20/19 20:08	1
Dibromofluoromethane	92		75 - 126	11/12/19 16:52	11/20/19 20:08	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/12/19 16:52	11/20/19 20:08	1
Toluene-d8 (Surr)	94		75 - 124	11/12/19 16:52	11/20/19 20:08	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Date Collected: 11/12/19 14:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2-Methylnaphthalene	0.052	J	0.080	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Phenanthrene	0.11		0.040	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Pyrene	0.020	J	0.040	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Date Collected: 11/12/19 14:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.040	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 17:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	46		31 - 166				11/20/19 10:21	11/25/19 17:03	1
Phenol-d5	52		30 - 153				11/20/19 10:21	11/25/19 17:03	1
Nitrobenzene-d5	41		37 - 147				11/20/19 10:21	11/25/19 17:03	1
2-Fluorobiphenyl	58		43 - 145				11/20/19 10:21	11/25/19 17:03	1
2,4,6-Tribromophenol	53		31 - 143				11/20/19 10:21	11/25/19 17:03	1
Terphenyl-d14	93		42 - 157				11/20/19 10:21	11/25/19 17:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.2	0.24	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Arsenic	7.7		0.62	0.21	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Barium	37		0.62	0.070	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Beryllium	0.61		0.25	0.058	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Boron	16		3.1	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Cadmium	0.13	B	0.12	0.022	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Calcium	57000		120	21	mg/Kg	☼	11/21/19 17:31	11/25/19 12:38	10
Chromium	16		0.62	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Cobalt	14		0.31	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Copper	31		0.62	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Iron	20000		12	6.4	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Lead	14		0.31	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Manganese	330		0.62	0.089	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Nickel	35		0.62	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Potassium	2900		31	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Selenium	<0.62		0.62	0.36	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Silver	2.4		0.31	0.080	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Sodium	280		62	9.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Thallium	0.90		0.62	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Vanadium	19		0.31	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1
Zinc	62		1.2	0.54	mg/Kg	☼	11/21/19 17:31	11/22/19 17:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 11:26	1
Boron	0.12	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Date Collected: 11/12/19 14:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 11:26	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:26	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:26	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 11:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 11:26	1
Manganese	2.1		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:26	1
Nickel	0.039		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:26	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 11:26	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:26	1
Zinc	0.15	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 11:26	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.035		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:21	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:55	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0063	mg/Kg	☼	11/18/19 14:20	11/19/19 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3		0.2	0.2	SU			11/18/19 16:15	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Date Collected: 11/12/19 14:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.025		0.017	0.0074	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/12/19 16:52	11/20/19 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131	11/12/19 16:52	11/20/19 20:33	1
Dibromofluoromethane	92		75 - 126	11/12/19 16:52	11/20/19 20:33	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/12/19 16:52	11/20/19 20:33	1
Toluene-d8 (Surr)	95		75 - 124	11/12/19 16:52	11/20/19 20:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Date Collected: 11/12/19 14:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2-Methylnaphthalene	0.039	J	0.082	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Phenanthrene	0.11		0.040	0.0057	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Pyrene	0.025	J	0.040	0.0081	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Date Collected: 11/12/19 14:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/20/19 10:21	11/25/19 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	48		31 - 166				11/20/19 10:21	11/25/19 17:26	1
Phenol-d5	54		30 - 153				11/20/19 10:21	11/25/19 17:26	1
Nitrobenzene-d5	51		37 - 147				11/20/19 10:21	11/25/19 17:26	1
2-Fluorobiphenyl	62		43 - 145				11/20/19 10:21	11/25/19 17:26	1
2,4,6-Tribromophenol	51		31 - 143				11/20/19 10:21	11/25/19 17:26	1
Terphenyl-d14	105		42 - 157				11/20/19 10:21	11/25/19 17:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47	J	1.2	0.24	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Arsenic	7.8		0.62	0.21	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Barium	36		0.62	0.070	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Beryllium	0.64		0.25	0.058	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Boron	15		3.1	0.29	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Cadmium	0.16	B	0.12	0.022	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Calcium	73000		120	21	mg/Kg	☼	11/21/19 17:31	11/25/19 12:42	10
Chromium	15		0.62	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Cobalt	13		0.31	0.081	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Copper	31		0.62	0.17	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Iron	19000		12	6.4	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Lead	14		0.31	0.14	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Magnesium	31000		6.2	3.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Manganese	380		0.62	0.090	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Nickel	35		0.62	0.18	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Potassium	2600		31	11	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Selenium	0.38	J	0.62	0.36	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Silver	2.1		0.31	0.080	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Sodium	240		62	9.1	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Thallium	0.86		0.62	0.31	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Vanadium	17		0.31	0.073	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1
Zinc	57		1.2	0.54	mg/Kg	☼	11/21/19 17:31	11/22/19 17:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 11:30	1
Boron	0.12	J	0.50	0.050	mg/L		11/19/19 15:54	11/20/19 11:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Date Collected: 11/12/19 14:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 11:30	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:30	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:30	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 11:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 11:30	1
Manganese	2.0	F1	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:30	1
Nickel	0.038		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:30	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 11:30	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 11:30	1
Zinc	0.14	J B	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 11:30	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		11/19/19 15:50	11/20/19 16:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 08:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.0064	mg/Kg	☼	11/18/19 14:20	11/19/19 09:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/18/19 16:19	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

GC/MS VOA

Prep Batch: 515817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	5035	
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	5035	
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	5035	
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	5035	
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	5035	
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	5035	
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	5035	
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	5035	
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	5035	
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	5035	
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	5035	
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	5035	

Analysis Batch: 516315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	8260B	515817
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	8260B	515817
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	8260B	515817
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	8260B	515817
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	8260B	515817
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	8260B	515817
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	8260B	515817
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	8260B	515817
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	8260B	515817
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	8260B	515817
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	8260B	515817
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	8260B	515817
MB 500-516315/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516315/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-516315/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 516409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	3541	
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	3541	
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	3541	
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	3541	
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	3541	
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	3541	
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	3541	
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	3541	
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	3541	
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	3541	
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	3541	
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	3541	
MB 500-516409/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-516409/2-A	Lab Control Sample	Total/NA	Solid	3541	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

GC/MS Semi VOA

Analysis Batch: 516557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-516409/1-A	Method Blank	Total/NA	Solid	8270D	516409
LCS 500-516409/2-A	Lab Control Sample	Total/NA	Solid	8270D	516409

Analysis Batch: 517148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	8270D	516409
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	8270D	516409
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	8270D	516409
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	8270D	516409
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	8270D	516409
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	8270D	516409
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	8270D	516409
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	8270D	516409
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	8270D	516409
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	8270D	516409
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	8270D	516409
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	8270D	516409

Metals

Leach Batch: 515593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	SPLP East	Solid	1312	
500-173369-2	2615V2-01-B30 (0-6)	SPLP East	Solid	1312	
500-173369-3	2615V2-01-B30 (6-12)	SPLP East	Solid	1312	
500-173369-4	2615V2-01-B30 (12-18)	SPLP East	Solid	1312	
500-173369-5	2615V2-01-B30 (12-18)D	SPLP East	Solid	1312	
500-173369-6	2615V2-01-B51 (0-5)	SPLP East	Solid	1312	
500-173369-7	2615V2-01-B51 (5-10)	SPLP East	Solid	1312	
500-173369-8	2615V2-01-B51 (10-15)	SPLP East	Solid	1312	
500-173369-9	2615V2-01-B51 (15-20)	SPLP East	Solid	1312	
500-173369-10	2615V2-A1-B25 (0-5)	SPLP East	Solid	1312	
500-173369-11	2615V2-A1-B25 (5-10)	SPLP East	Solid	1312	
500-173369-12	2615V2-A1-B25 (10-15)	SPLP East	Solid	1312	
LB 500-515593/1-C	Method Blank	SPLP East	Solid	1312	

Leach Batch: 515596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	TCLP	Solid	1311	
500-173369-2	2615V2-01-B30 (0-6)	TCLP	Solid	1311	
500-173369-3	2615V2-01-B30 (6-12)	TCLP	Solid	1311	
500-173369-4	2615V2-01-B30 (12-18)	TCLP	Solid	1311	
500-173369-5	2615V2-01-B30 (12-18)D	TCLP	Solid	1311	
500-173369-6	2615V2-01-B51 (0-5)	TCLP	Solid	1311	
500-173369-7	2615V2-01-B51 (5-10)	TCLP	Solid	1311	
500-173369-8	2615V2-01-B51 (10-15)	TCLP	Solid	1311	
500-173369-9	2615V2-01-B51 (15-20)	TCLP	Solid	1311	
500-173369-10	2615V2-A1-B25 (0-5)	TCLP	Solid	1311	
500-173369-11	2615V2-A1-B25 (5-10)	TCLP	Solid	1311	
500-173369-12	2615V2-A1-B25 (10-15)	TCLP	Solid	1311	
LB 500-515596/1-B	Method Blank	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Metals (Continued)

Leach Batch: 515596 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-515596/1-C	Method Blank	TCLP	Solid	1311	
500-173369-4 MS	2615V2-01-B30 (12-18)	TCLP	Solid	1311	
500-173369-4 MSD	2615V2-01-B30 (12-18)	TCLP	Solid	1311	
500-173369-12 MS	2615V2-A1-B25 (10-15)	TCLP	Solid	1311	
500-173369-4 DU	2615V2-01-B30 (12-18)	TCLP	Solid	1311	
500-173369-12 DU	2615V2-A1-B25 (10-15)	TCLP	Solid	1311	

Prep Batch: 515957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	7471B	
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	7471B	
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	7471B	
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	7471B	
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	7471B	
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	7471B	
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	7471B	
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	7471B	
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	7471B	
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	7471B	
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	7471B	
MB 500-515957/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-515957/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-173369-9 MS	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	
500-173369-9 MSD	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	
500-173369-9 DU	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	

Analysis Batch: 516155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	7471B	515957
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	7471B	515957
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	7471B	515957
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	7471B	515957
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	7471B	515957
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	7471B	515957
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	7471B	515957
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	7471B	515957
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	515957
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	7471B	515957
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	7471B	515957
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	7471B	515957
MB 500-515957/12-A	Method Blank	Total/NA	Solid	7471B	515957
LCS 500-515957/13-A	Lab Control Sample	Total/NA	Solid	7471B	515957
500-173369-9 MS	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	515957
500-173369-9 MSD	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	515957
500-173369-9 DU	2615V2-01-B51 (15-20)	Total/NA	Solid	7471B	515957

Prep Batch: 516162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	TCLP	Solid	7470A	515596
500-173369-2	2615V2-01-B30 (0-6)	TCLP	Solid	7470A	515596

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Metals (Continued)

Prep Batch: 516162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-3	2615V2-01-B30 (6-12)	TCLP	Solid	7470A	515596
500-173369-4	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	515596
500-173369-5	2615V2-01-B30 (12-18)D	TCLP	Solid	7470A	515596
500-173369-6	2615V2-01-B51 (0-5)	TCLP	Solid	7470A	515596
500-173369-7	2615V2-01-B51 (5-10)	TCLP	Solid	7470A	515596
500-173369-8	2615V2-01-B51 (10-15)	TCLP	Solid	7470A	515596
500-173369-9	2615V2-01-B51 (15-20)	TCLP	Solid	7470A	515596
500-173369-10	2615V2-A1-B25 (0-5)	TCLP	Solid	7470A	515596
500-173369-11	2615V2-A1-B25 (5-10)	TCLP	Solid	7470A	515596
500-173369-12	2615V2-A1-B25 (10-15)	TCLP	Solid	7470A	515596
LB 500-515596/1-B	Method Blank	TCLP	Solid	7470A	515596
MB 500-516162/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-516162/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-173369-4 MS	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	515596
500-173369-4 MSD	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	515596
500-173369-4 DU	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	515596

Prep Batch: 516247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	SPLP East	Solid	3010A	515593
500-173369-2	2615V2-01-B30 (0-6)	SPLP East	Solid	3010A	515593
500-173369-3	2615V2-01-B30 (6-12)	SPLP East	Solid	3010A	515593
500-173369-4	2615V2-01-B30 (12-18)	SPLP East	Solid	3010A	515593
500-173369-5	2615V2-01-B30 (12-18)D	SPLP East	Solid	3010A	515593
500-173369-6	2615V2-01-B51 (0-5)	SPLP East	Solid	3010A	515593
500-173369-7	2615V2-01-B51 (5-10)	SPLP East	Solid	3010A	515593
500-173369-8	2615V2-01-B51 (10-15)	SPLP East	Solid	3010A	515593
500-173369-9	2615V2-01-B51 (15-20)	SPLP East	Solid	3010A	515593
500-173369-10	2615V2-A1-B25 (0-5)	SPLP East	Solid	3010A	515593
500-173369-11	2615V2-A1-B25 (5-10)	SPLP East	Solid	3010A	515593
500-173369-12	2615V2-A1-B25 (10-15)	SPLP East	Solid	3010A	515593
LB 500-515593/1-C	Method Blank	SPLP East	Solid	3010A	515593
LCS 500-516247/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 516250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	TCLP	Solid	3010A	515596
500-173369-2	2615V2-01-B30 (0-6)	TCLP	Solid	3010A	515596
500-173369-3	2615V2-01-B30 (6-12)	TCLP	Solid	3010A	515596
500-173369-4	2615V2-01-B30 (12-18)	TCLP	Solid	3010A	515596
500-173369-5	2615V2-01-B30 (12-18)D	TCLP	Solid	3010A	515596
500-173369-6	2615V2-01-B51 (0-5)	TCLP	Solid	3010A	515596
500-173369-7	2615V2-01-B51 (5-10)	TCLP	Solid	3010A	515596
500-173369-8	2615V2-01-B51 (10-15)	TCLP	Solid	3010A	515596
500-173369-9	2615V2-01-B51 (15-20)	TCLP	Solid	3010A	515596
500-173369-10	2615V2-A1-B25 (0-5)	TCLP	Solid	3010A	515596
500-173369-11	2615V2-A1-B25 (5-10)	TCLP	Solid	3010A	515596
500-173369-12	2615V2-A1-B25 (10-15)	TCLP	Solid	3010A	515596
LB 500-515596/1-C	Method Blank	TCLP	Solid	3010A	515596
LCS 500-516250/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173369-12 MS	2615V2-A1-B25 (10-15)	TCLP	Solid	3010A	515596

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Metals (Continued)

Prep Batch: 516250 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-12 DU	2615V2-A1-B25 (10-15)	TCLP	Solid	3010A	515596

Analysis Batch: 516412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	TCLP	Solid	7470A	516162
500-173369-2	2615V2-01-B30 (0-6)	TCLP	Solid	7470A	516162
500-173369-3	2615V2-01-B30 (6-12)	TCLP	Solid	7470A	516162
500-173369-4	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	516162
500-173369-5	2615V2-01-B30 (12-18)D	TCLP	Solid	7470A	516162
500-173369-6	2615V2-01-B51 (0-5)	TCLP	Solid	7470A	516162
500-173369-7	2615V2-01-B51 (5-10)	TCLP	Solid	7470A	516162
500-173369-8	2615V2-01-B51 (10-15)	TCLP	Solid	7470A	516162
500-173369-9	2615V2-01-B51 (15-20)	TCLP	Solid	7470A	516162
500-173369-10	2615V2-A1-B25 (0-5)	TCLP	Solid	7470A	516162
500-173369-11	2615V2-A1-B25 (5-10)	TCLP	Solid	7470A	516162
500-173369-12	2615V2-A1-B25 (10-15)	TCLP	Solid	7470A	516162
LB 500-515596/1-B	Method Blank	TCLP	Solid	7470A	516162
MB 500-516162/12-A	Method Blank	Total/NA	Solid	7470A	516162
LCS 500-516162/13-A	Lab Control Sample	Total/NA	Solid	7470A	516162
500-173369-4 MS	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	516162
500-173369-4 MSD	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	516162
500-173369-4 DU	2615V2-01-B30 (12-18)	TCLP	Solid	7470A	516162

Analysis Batch: 516528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	SPLP East	Solid	6010B	516247
500-173369-1	2615V2-01-B22 (0-7)	TCLP	Solid	6010B	516250
500-173369-2	2615V2-01-B30 (0-6)	SPLP East	Solid	6010B	516247
500-173369-2	2615V2-01-B30 (0-6)	TCLP	Solid	6010B	516250
500-173369-3	2615V2-01-B30 (6-12)	SPLP East	Solid	6010B	516247
500-173369-3	2615V2-01-B30 (6-12)	TCLP	Solid	6010B	516250
500-173369-4	2615V2-01-B30 (12-18)	SPLP East	Solid	6010B	516247
500-173369-4	2615V2-01-B30 (12-18)	TCLP	Solid	6010B	516250
500-173369-5	2615V2-01-B30 (12-18)D	SPLP East	Solid	6010B	516247
500-173369-5	2615V2-01-B30 (12-18)D	TCLP	Solid	6010B	516250
500-173369-6	2615V2-01-B51 (0-5)	SPLP East	Solid	6010B	516247
500-173369-6	2615V2-01-B51 (0-5)	TCLP	Solid	6010B	516250
500-173369-7	2615V2-01-B51 (5-10)	SPLP East	Solid	6010B	516247
500-173369-7	2615V2-01-B51 (5-10)	TCLP	Solid	6010B	516250
500-173369-8	2615V2-01-B51 (10-15)	SPLP East	Solid	6010B	516247
500-173369-8	2615V2-01-B51 (10-15)	TCLP	Solid	6010B	516250
500-173369-9	2615V2-01-B51 (15-20)	SPLP East	Solid	6010B	516247
500-173369-9	2615V2-01-B51 (15-20)	TCLP	Solid	6010B	516250
500-173369-10	2615V2-A1-B25 (0-5)	SPLP East	Solid	6010B	516247
500-173369-10	2615V2-A1-B25 (0-5)	TCLP	Solid	6010B	516250
500-173369-11	2615V2-A1-B25 (5-10)	SPLP East	Solid	6010B	516247
500-173369-11	2615V2-A1-B25 (5-10)	TCLP	Solid	6010B	516250
500-173369-12	2615V2-A1-B25 (10-15)	SPLP East	Solid	6010B	516247
500-173369-12	2615V2-A1-B25 (10-15)	TCLP	Solid	6010B	516250
LB 500-515593/1-C	Method Blank	SPLP East	Solid	6010B	516247
LB 500-515596/1-C	Method Blank	TCLP	Solid	6010B	516250

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Metals (Continued)

Analysis Batch: 516528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-516247/2-A	Lab Control Sample	Total/NA	Solid	6010B	516247
LCS 500-516250/2-A	Lab Control Sample	Total/NA	Solid	6010B	516250
500-173369-12 MS	2615V2-A1-B25 (10-15)	TCLP	Solid	6010B	516250
500-173369-12 DU	2615V2-A1-B25 (10-15)	TCLP	Solid	6010B	516250

Analysis Batch: 516578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	TCLP	Solid	6020A	516250
500-173369-2	2615V2-01-B30 (0-6)	TCLP	Solid	6020A	516250
500-173369-3	2615V2-01-B30 (6-12)	TCLP	Solid	6020A	516250
500-173369-4	2615V2-01-B30 (12-18)	TCLP	Solid	6020A	516250
500-173369-5	2615V2-01-B30 (12-18)D	TCLP	Solid	6020A	516250
500-173369-6	2615V2-01-B51 (0-5)	TCLP	Solid	6020A	516250
500-173369-7	2615V2-01-B51 (5-10)	TCLP	Solid	6020A	516250
500-173369-8	2615V2-01-B51 (10-15)	TCLP	Solid	6020A	516250
500-173369-9	2615V2-01-B51 (15-20)	TCLP	Solid	6020A	516250
500-173369-10	2615V2-A1-B25 (0-5)	TCLP	Solid	6020A	516250
500-173369-11	2615V2-A1-B25 (5-10)	TCLP	Solid	6020A	516250
500-173369-12	2615V2-A1-B25 (10-15)	TCLP	Solid	6020A	516250
LB 500-515596/1-C	Method Blank	TCLP	Solid	6020A	516250
LCS 500-516250/2-A	Lab Control Sample	Total/NA	Solid	6020A	516250
500-173369-12 MS	2615V2-A1-B25 (10-15)	TCLP	Solid	6020A	516250
500-173369-12 DU	2615V2-A1-B25 (10-15)	TCLP	Solid	6020A	516250

Prep Batch: 516711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	3050B	
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	3050B	
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	3050B	
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	3050B	
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	3050B	
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	3050B	
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	3050B	
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	3050B	
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	3050B	
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	3050B	
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	3050B	
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	3050B	
MB 500-516711/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-516711/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 517103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	6010B	516711
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	6010B	516711
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	6010B	516711
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	6010B	516711
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	6010B	516711
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	6010B	516711
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	6010B	516711
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	6010B	516711

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Metals (Continued)

Analysis Batch: 517103 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	6010B	516711
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	6010B	516711
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	6010B	516711
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	6010B	516711
MB 500-516711/1-A	Method Blank	Total/NA	Solid	6010B	516711
LCS 500-516711/2-A	Lab Control Sample	Total/NA	Solid	6010B	516711

Analysis Batch: 517232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	6010B	516711
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	6010B	516711
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	6010B	516711
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	6010B	516711
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	6010B	516711
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	6010B	516711
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	6010B	516711
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	6010B	516711
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	6010B	516711
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	6010B	516711
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	6010B	516711

General Chemistry

Analysis Batch: 515387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	Moisture	
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	Moisture	
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	Moisture	
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	Moisture	
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	Moisture	
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	Moisture	
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	Moisture	
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	Moisture	
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	Moisture	
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	Moisture	
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	Moisture	
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	Moisture	

Analysis Batch: 516019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-1	2615V2-01-B22 (0-7)	Total/NA	Solid	9045D	
500-173369-2	2615V2-01-B30 (0-6)	Total/NA	Solid	9045D	
500-173369-3	2615V2-01-B30 (6-12)	Total/NA	Solid	9045D	
500-173369-4	2615V2-01-B30 (12-18)	Total/NA	Solid	9045D	
500-173369-5	2615V2-01-B30 (12-18)D	Total/NA	Solid	9045D	
500-173369-6	2615V2-01-B51 (0-5)	Total/NA	Solid	9045D	
500-173369-7	2615V2-01-B51 (5-10)	Total/NA	Solid	9045D	
500-173369-8	2615V2-01-B51 (10-15)	Total/NA	Solid	9045D	
500-173369-9	2615V2-01-B51 (15-20)	Total/NA	Solid	9045D	
500-173369-10	2615V2-A1-B25 (0-5)	Total/NA	Solid	9045D	
500-173369-11	2615V2-A1-B25 (5-10)	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

General Chemistry (Continued)

Analysis Batch: 516019 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173369-12	2615V2-A1-B25 (10-15)	Total/NA	Solid	9045D	
LCS 500-516019/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-516019/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173369-1 DU	2615V2-01-B22 (0-7)	Total/NA	Solid	9045D	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-173369-1	2615V2-01-B22 (0-7)	103	89	95	95
500-173369-2	2615V2-01-B30 (0-6)	102	89	97	97
500-173369-3	2615V2-01-B30 (6-12)	103	89	93	94
500-173369-4	2615V2-01-B30 (12-18)	101	90	96	95
500-173369-5	2615V2-01-B30 (12-18)D	102	88	95	95
500-173369-6	2615V2-01-B51 (0-5)	106	88	96	94
500-173369-7	2615V2-01-B51 (5-10)	102	89	94	96
500-173369-8	2615V2-01-B51 (10-15)	99	89	93	94
500-173369-9	2615V2-01-B51 (15-20)	104	91	96	94
500-173369-10	2615V2-A1-B25 (0-5)	100	92	97	94
500-173369-11	2615V2-A1-B25 (5-10)	98	92	95	94
500-173369-12	2615V2-A1-B25 (10-15)	101	92	94	95
LCS 500-516315/4	Lab Control Sample	91	86	89	94
LCS 500-516315/5	Lab Control Sample Dup	94	87	88	93
MB 500-516315/7	Method Blank	97	86	88	92

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173369-1	2615V2-01-B22 (0-7)	63	64	64	74	73	93
500-173369-2	2615V2-01-B30 (0-6)	64	66	68	64	64	93
500-173369-3	2615V2-01-B30 (6-12)	59	65	65	77	78	114
500-173369-4	2615V2-01-B30 (12-18)	45	50	50	69	63	113
500-173369-5	2615V2-01-B30 (12-18)D	52	52	52	65	53	93
500-173369-6	2615V2-01-B51 (0-5)	58	63	59	73	73	109
500-173369-7	2615V2-01-B51 (5-10)	59	62	59	72	61	106
500-173369-8	2615V2-01-B51 (10-15)	52	59	58	68	62	111
500-173369-9	2615V2-01-B51 (15-20)	50	59	52	67	49	99
500-173369-10	2615V2-A1-B25 (0-5)	56	60	58	69	66	110
500-173369-11	2615V2-A1-B25 (5-10)	46	52	41	58	53	93
500-173369-12	2615V2-A1-B25 (10-15)	48	54	51	62	51	105
LCS 500-516409/2-A	Lab Control Sample	130	117	94	98	89	98
MB 500-516409/1-A	Method Blank	128	113	94	92	71	96

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516315/7
Matrix: Solid
Analysis Batch: 516315

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<0.020		0.020	0.0087	mg/Kg			11/20/19 12:27	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 12:27	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/20/19 12:27	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 12:27	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/20/19 12:27	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/20/19 12:27	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/20/19 12:27	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 12:27	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/20/19 12:27	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 12:27	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 12:27	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 12:27	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/20/19 12:27	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 12:27	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/20/19 12:27	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 12:27	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 12:27	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 12:27	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/20/19 12:27	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 12:27	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/20/19 12:27	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 12:27	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 12:27	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 12:27	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/20/19 12:27	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 12:27	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/20/19 12:27	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 12:27	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 12:27	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 12:27	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 12:27	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/20/19 12:27	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/20/19 12:27	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 12:27	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/20/19 12:27	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 12:27	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/20/19 12:27	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		75 - 131		11/20/19 12:27	1
Dibromofluoromethane	86		75 - 126		11/20/19 12:27	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134		11/20/19 12:27	1
Toluene-d8 (Surr)	92		75 - 124		11/20/19 12:27	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516315/4
Matrix: Solid
Analysis Batch: 516315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0463		mg/Kg		93	40 - 150
Benzene	0.0500	0.0434		mg/Kg		87	70 - 125
Bromodichloromethane	0.0500	0.0428		mg/Kg		86	67 - 129
Bromoform	0.0500	0.0385		mg/Kg		77	68 - 136
Bromomethane	0.0500	0.0523		mg/Kg		105	70 - 130
2-Butanone (MEK)	0.0500	0.0433		mg/Kg		87	47 - 138
Carbon disulfide	0.0500	0.0407		mg/Kg		81	70 - 129
Carbon tetrachloride	0.0500	0.0432		mg/Kg		86	75 - 125
Chlorobenzene	0.0500	0.0446		mg/Kg		89	50 - 150
Chloroethane	0.0500	0.0464		mg/Kg		93	75 - 125
Chloroform	0.0500	0.0415		mg/Kg		83	57 - 135
Chloromethane	0.0500	0.0476		mg/Kg		95	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0411		mg/Kg		82	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0428		mg/Kg		86	70 - 125
Dibromochloromethane	0.0500	0.0418		mg/Kg		84	69 - 125
1,1-Dichloroethane	0.0500	0.0416		mg/Kg		83	70 - 125
1,2-Dichloroethane	0.0500	0.0431		mg/Kg		86	70 - 130
1,1-Dichloroethene	0.0500	0.0429		mg/Kg		86	70 - 120
1,2-Dichloropropane	0.0500	0.0429		mg/Kg		86	70 - 125
Ethylbenzene	0.0500	0.0442		mg/Kg		88	61 - 136
2-Hexanone	0.0500	0.0428		mg/Kg		86	48 - 146
Methylene Chloride	0.0500	0.0409		mg/Kg		82	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0397		mg/Kg		79	50 - 148
Methyl tert-butyl ether	0.0500	0.0422		mg/Kg		84	50 - 140
Styrene	0.0500	0.0437		mg/Kg		87	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0398		mg/Kg		80	70 - 122
Tetrachloroethene	0.0500	0.0454		mg/Kg		91	70 - 124
Toluene	0.0500	0.0453		mg/Kg		91	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0416		mg/Kg		83	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0436		mg/Kg		87	70 - 125
1,1,1-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 128
1,1,2-Trichloroethane	0.0500	0.0440		mg/Kg		88	70 - 125
Trichloroethene	0.0500	0.0433		mg/Kg		87	70 - 125
Vinyl acetate	0.0500	0.0380		mg/Kg		76	40 - 153
Vinyl chloride	0.0500	0.0486		mg/Kg		97	70 - 125
Xylenes, Total	0.100	0.0877		mg/Kg		88	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	86		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516315/5
Matrix: Solid
Analysis Batch: 516315

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0459		mg/Kg		92	40 - 150	1	30
Benzene	0.0500	0.0420		mg/Kg		84	70 - 125	3	30
Bromodichloromethane	0.0500	0.0410		mg/Kg		82	67 - 129	4	30
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136	5	30
Bromomethane	0.0500	0.0497		mg/Kg		99	70 - 130	5	30
2-Butanone (MEK)	0.0500	0.0390		mg/Kg		78	47 - 138	10	30
Carbon disulfide	0.0500	0.0395		mg/Kg		79	70 - 129	3	30
Carbon tetrachloride	0.0500	0.0414		mg/Kg		83	75 - 125	4	30
Chlorobenzene	0.0500	0.0419		mg/Kg		84	50 - 150	6	30
Chloroethane	0.0500	0.0450		mg/Kg		90	75 - 125	3	30
Chloroform	0.0500	0.0401		mg/Kg		80	57 - 135	3	30
Chloromethane	0.0500	0.0463		mg/Kg		93	70 - 125	3	30
cis-1,2-Dichloroethene	0.0500	0.0402		mg/Kg		80	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0411		mg/Kg		82	70 - 125	4	30
Dibromochloromethane	0.0500	0.0389		mg/Kg		78	69 - 125	7	30
1,1-Dichloroethane	0.0500	0.0400		mg/Kg		80	70 - 125	4	30
1,2-Dichloroethane	0.0500	0.0418		mg/Kg		84	70 - 130	3	30
1,1-Dichloroethene	0.0500	0.0421		mg/Kg		84	70 - 120	2	30
1,2-Dichloropropane	0.0500	0.0411		mg/Kg		82	70 - 125	4	30
Ethylbenzene	0.0500	0.0416		mg/Kg		83	61 - 136	6	30
2-Hexanone	0.0500	0.0389		mg/Kg		78	48 - 146	10	30
Methylene Chloride	0.0500	0.0401		mg/Kg		80	70 - 126	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0362		mg/Kg		72	50 - 148	9	30
Methyl tert-butyl ether	0.0500	0.0403		mg/Kg		81	50 - 140	5	30
Styrene	0.0500	0.0418		mg/Kg		84	70 - 125	5	30
1,1,2,2-Tetrachloroethane	0.0500	0.0387		mg/Kg		77	70 - 122	3	30
Tetrachloroethene	0.0500	0.0429		mg/Kg		86	70 - 124	6	30
Toluene	0.0500	0.0425		mg/Kg		85	70 - 125	6	30
trans-1,2-Dichloroethene	0.0500	0.0403		mg/Kg		81	70 - 125	3	30
trans-1,3-Dichloropropene	0.0500	0.0410		mg/Kg		82	70 - 125	6	30
1,1,1-Trichloroethane	0.0500	0.0420		mg/Kg		84	70 - 128	3	30
1,1,2-Trichloroethane	0.0500	0.0413		mg/Kg		83	70 - 125	6	30
Trichloroethene	0.0500	0.0423		mg/Kg		85	70 - 125	2	30
Vinyl acetate	0.0500	0.0321		mg/Kg		64	40 - 153	17	30
Vinyl chloride	0.0500	0.0469		mg/Kg		94	70 - 125	3	30
Xylenes, Total	0.100	0.0835		mg/Kg		83	53 - 147	5	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	87		75 - 126
1,2-Dichloroethane-d4 (Surr)	88		70 - 134
Toluene-d8 (Surr)	93		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516409/1-A
Matrix: Solid
Analysis Batch: 516557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516409

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/20/19 10:21	11/21/19 13:01	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516409/1-A
Matrix: Solid
Analysis Batch: 516557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516409

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/20/19 10:21	11/21/19 13:01	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/20/19 10:21	11/21/19 13:01	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	128		31 - 166	11/20/19 10:21	11/21/19 13:01	1
Phenol-d5	113		30 - 153	11/20/19 10:21	11/21/19 13:01	1
Nitrobenzene-d5	94		37 - 147	11/20/19 10:21	11/21/19 13:01	1
2-Fluorobiphenyl	92		43 - 145	11/20/19 10:21	11/21/19 13:01	1
2,4,6-Tribromophenol	71		31 - 143	11/20/19 10:21	11/21/19 13:01	1
Terphenyl-d14	96		42 - 157	11/20/19 10:21	11/21/19 13:01	1

Lab Sample ID: LCS 500-516409/2-A
Matrix: Solid
Analysis Batch: 516557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.62		mg/Kg		121	56 - 122
Bis(2-chloroethyl)ether	1.33	1.37		mg/Kg		103	55 - 111
1,3-Dichlorobenzene	1.33	1.31		mg/Kg		98	65 - 124
1,4-Dichlorobenzene	1.33	1.30		mg/Kg		98	61 - 110
1,2-Dichlorobenzene	1.33	1.30		mg/Kg		98	62 - 110
2-Methylphenol	1.33	1.48		mg/Kg		111	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.71	*	mg/Kg		129	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.52		mg/Kg		114	56 - 118
Hexachloroethane	1.33	1.33		mg/Kg		100	60 - 114
2-Chlorophenol	1.33	1.43		mg/Kg		107	64 - 110
Nitrobenzene	1.33	1.41		mg/Kg		106	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.37		mg/Kg		103	60 - 112
1,2,4-Trichlorobenzene	1.33	1.25		mg/Kg		93	66 - 117
Isophorone	1.33	1.39		mg/Kg		104	55 - 110
2,4-Dimethylphenol	1.33	1.26		mg/Kg		95	60 - 110
Hexachlorobutadiene	1.33	1.25		mg/Kg		94	56 - 120
Naphthalene	1.33	1.31		mg/Kg		99	63 - 110
2,4-Dichlorophenol	1.33	1.30		mg/Kg		98	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516409/2-A

Matrix: Solid

Analysis Batch: 516557

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.25		mg/Kg		94	30 - 150
2,4,6-Trichlorophenol	1.33	1.23		mg/Kg		92	57 - 120
2,4,5-Trichlorophenol	1.33	1.28		mg/Kg		96	50 - 120
Hexachlorocyclopentadiene	1.33	0.446	J	mg/Kg		33	10 - 133
2-Methylnaphthalene	1.33	1.32		mg/Kg		99	69 - 112
2-Nitroaniline	1.33	1.44		mg/Kg		108	57 - 124
2-Chloronaphthalene	1.33	1.32		mg/Kg		99	69 - 114
4-Chloro-3-methylphenol	1.33	1.31		mg/Kg		98	65 - 122
2,6-Dinitrotoluene	1.33	1.36		mg/Kg		102	70 - 123
2-Nitrophenol	1.33	1.31		mg/Kg		98	60 - 120
3-Nitroaniline	1.33	1.11		mg/Kg		83	40 - 122
Dimethyl phthalate	1.33	1.35		mg/Kg		102	69 - 116
2,4-Dinitrophenol	2.67	1.05		mg/Kg		39	10 - 100
Acenaphthylene	1.33	1.37		mg/Kg		103	68 - 120
2,4-Dinitrotoluene	1.33	1.40		mg/Kg		105	69 - 124
Acenaphthene	1.33	1.33		mg/Kg		100	65 - 124
Dibenzofuran	1.33	1.34		mg/Kg		101	66 - 115
4-Nitrophenol	2.67	2.55		mg/Kg		96	30 - 122
Fluorene	1.33	1.37		mg/Kg		103	62 - 120
4-Nitroaniline	1.33	1.29		mg/Kg		97	60 - 160
4-Bromophenyl phenyl ether	1.33	1.29		mg/Kg		97	68 - 118
Hexachlorobenzene	1.33	1.32		mg/Kg		99	63 - 124
Diethyl phthalate	1.33	1.39		mg/Kg		104	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.31		mg/Kg		99	62 - 119
Pentachlorophenol	2.67	1.80		mg/Kg		67	13 - 112
N-Nitrosodiphenylamine	1.33	1.39		mg/Kg		105	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.72		mg/Kg		64	10 - 110
Phenanthrene	1.33	1.34		mg/Kg		101	62 - 120
Anthracene	1.33	1.36		mg/Kg		102	70 - 114
Carbazole	1.33	1.45		mg/Kg		109	65 - 142
Di-n-butyl phthalate	1.33	1.45		mg/Kg		109	65 - 120
Fluoranthene	1.33	1.37		mg/Kg		103	62 - 120
Pyrene	1.33	1.40		mg/Kg		105	61 - 128
Butyl benzyl phthalate	1.33	1.45		mg/Kg		109	71 - 129
Benzo[a]anthracene	1.33	1.30		mg/Kg		97	67 - 122
Chrysene	1.33	1.27		mg/Kg		96	63 - 120
3,3'-Dichlorobenzidine	1.33	1.02		mg/Kg		76	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.45		mg/Kg		109	72 - 131
Di-n-octyl phthalate	1.33	1.44		mg/Kg		108	68 - 134
Benzo[b]fluoranthene	1.33	1.41		mg/Kg		106	69 - 129
Benzo[k]fluoranthene	1.33	1.38		mg/Kg		103	68 - 127
Benzo[a]pyrene	1.33	1.41		mg/Kg		106	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.38		mg/Kg		104	68 - 130
Dibenz(a,h)anthracene	1.33	1.36		mg/Kg		102	64 - 131
Benzo[g,h,i]perylene	1.33	1.43		mg/Kg		108	72 - 131
3 & 4 Methylphenol	1.33	1.53		mg/Kg		115	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516409/2-A
Matrix: Solid
Analysis Batch: 516557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516409

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	130		31 - 166
Phenol-d5	117		30 - 153
Nitrobenzene-d5	94		37 - 147
2-Fluorobiphenyl	98		43 - 145
2,4,6-Tribromophenol	89		31 - 143
Terphenyl-d14	98		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-516247/2-A
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits

Lab Sample ID: LCS 500-516250/2-A
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516250

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Beryllium	0.0500	0.0561		mg/L		112	80 - 120	
Boron	1.00	1.13		mg/L		113	80 - 120	
Cadmium	0.0500	0.0556		mg/L		111	80 - 120	
Chromium	0.200	0.230		mg/L		115	80 - 120	
Cobalt	0.500	0.553		mg/L		111	80 - 120	
Iron	1.00	1.11		mg/L		111	80 - 120	
Lead	0.100	0.112		mg/L		112	80 - 120	
Manganese	0.500	0.560		mg/L		112	80 - 120	
Nickel	0.500	0.554		mg/L		111	80 - 120	
Selenium	0.100	0.0994		mg/L		99	80 - 120	
Silver	0.0500	0.0542	^	mg/L		108	80 - 120	
Zinc	0.500	0.550		mg/L		110	80 - 120	

Lab Sample ID: MB 500-516711/1-A
Matrix: Solid
Analysis Batch: 517103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516711

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Arsenic	<1.0		1.0	0.34	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Barium	<1.0		1.0	0.11	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Beryllium	<0.40		0.40	0.093	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Boron	<5.0		5.0	0.47	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Cadmium	0.0732	J	0.20	0.036	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Calcium	<20		20	3.4	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Chromium	<1.0		1.0	0.50	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Cobalt	<0.50		0.50	0.13	mg/Kg		11/21/19 17:31	11/22/19 16:07	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-516711/1-A
Matrix: Solid
Analysis Batch: 517103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<1.0		1.0	0.28	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Iron	<20		20	10	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Lead	<0.50		0.50	0.23	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Magnesium	<10		10	5.0	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Manganese	<1.0		1.0	0.15	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Nickel	<1.0		1.0	0.29	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Potassium	<50		50	18	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Silver	<0.50		0.50	0.13	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Sodium	<100		100	15	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Thallium	<1.0		1.0	0.50	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Vanadium	<0.50		0.50	0.12	mg/Kg		11/21/19 17:31	11/22/19 16:07	1
Zinc	<2.0		2.0	0.88	mg/Kg		11/21/19 17:31	11/22/19 16:07	1

Lab Sample ID: LCS 500-516711/2-A
Matrix: Solid
Analysis Batch: 517103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	49.1		mg/Kg		98	80 - 120
Arsenic	10.0	8.96		mg/Kg		90	80 - 120
Barium	200	192		mg/Kg		96	80 - 120
Beryllium	5.00	4.64		mg/Kg		93	80 - 120
Boron	100	85.2		mg/Kg		85	80 - 120
Cadmium	5.00	4.66		mg/Kg		93	80 - 120
Calcium	1000	888		mg/Kg		89	80 - 120
Chromium	20.0	19.4		mg/Kg		97	80 - 120
Cobalt	50.0	48.1		mg/Kg		96	80 - 120
Copper	25.0	25.1		mg/Kg		100	80 - 120
Iron	100	109		mg/Kg		109	80 - 120
Lead	10.0	8.92		mg/Kg		89	80 - 120
Magnesium	1000	931		mg/Kg		93	80 - 120
Manganese	50.0	47.8		mg/Kg		96	80 - 120
Nickel	50.0	48.1		mg/Kg		96	80 - 120
Potassium	1000	1000		mg/Kg		100	80 - 120
Selenium	10.0	8.41		mg/Kg		84	80 - 120
Silver	5.00	4.61		mg/Kg		92	80 - 120
Sodium	1000	1020		mg/Kg		102	80 - 120
Thallium	10.0	8.81		mg/Kg		88	80 - 120
Vanadium	50.0	47.5		mg/Kg		95	80 - 120
Zinc	50.0	46.7		mg/Kg		93	80 - 120

Lab Sample ID: LB 500-515596/1-C
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516250

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/19/19 15:54	11/20/19 10:26	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-515596/1-C
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516250

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.50		0.50	0.050	mg/L		11/19/19 15:54	11/20/19 10:26	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/19/19 15:54	11/20/19 10:26	1
Chromium	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:26	1
Cobalt	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:26	1
Iron	<0.40		0.40	0.20	mg/L		11/19/19 15:54	11/20/19 10:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 15:54	11/20/19 10:26	1
Manganese	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:26	1
Nickel	<0.025		0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:26	1
Selenium	<0.050		0.050	0.020	mg/L		11/19/19 15:54	11/20/19 10:26	1
Silver	<0.025	^	0.025	0.010	mg/L		11/19/19 15:54	11/20/19 10:26	1
Zinc	0.0383	J	0.50	0.020	mg/L		11/19/19 15:54	11/20/19 10:26	1

Lab Sample ID: 500-173369-12 MS
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: 2615V2-A1-B25 (10-15)
Prep Type: TCLP
Prep Batch: 516250

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.62		0.500	1.04		mg/L		82	75 - 125
Beryllium	<0.0040		0.0500	0.0472		mg/L		94	75 - 125
Boron	0.12	J	1.00	1.08		mg/L		96	75 - 125
Cadmium	<0.0050		0.0500	0.0468		mg/L		94	75 - 125
Chromium	<0.025		0.200	0.194		mg/L		97	75 - 125
Cobalt	0.016	J	0.500	0.459		mg/L		89	75 - 125
Iron	<0.40		1.00	0.985		mg/L		99	75 - 125
Lead	<0.0075		0.100	0.0938		mg/L		94	75 - 125
Manganese	2.0	F1	0.500	2.30	F1	mg/L		62	75 - 125
Nickel	0.038		0.500	0.484		mg/L		89	75 - 125
Selenium	<0.050		0.100	0.0902		mg/L		90	75 - 125
Silver	<0.025	^	0.0500	0.0496	^	mg/L		99	75 - 125
Zinc	0.14	J B	0.500	0.606		mg/L		94	75 - 125

Lab Sample ID: 500-173369-12 DU
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: 2615V2-A1-B25 (10-15)
Prep Type: TCLP
Prep Batch: 516250

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	0.62		0.622		mg/L		0.3	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.12	J	0.123	J	mg/L		1	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.016	J	0.0159	J	mg/L		0.2	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	2.0	F1	1.90		mg/L		4	20
Nickel	0.038		0.0384		mg/L		0.5	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025	^	<0.025	^	mg/L		NC	20
Zinc	0.14	J B	0.130	J	mg/L		4	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-515593/1-C
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 516247

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/19/19 15:50	11/20/19 15:21	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-516250/2-A
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516250
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.505		mg/L		101	80 - 120
Thallium	0.100	0.0991		mg/L		99	80 - 120

Lab Sample ID: LB 500-515596/1-C
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516250

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/19/19 15:54	11/20/19 16:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/19/19 15:54	11/20/19 16:14	1

Lab Sample ID: 500-173369-12 MS
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: 2615V2-A1-B25 (10-15)
Prep Type: TCLP
Prep Batch: 516250
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.501		mg/L		100	75 - 125
Thallium	<0.0020		0.100	0.101		mg/L		101	75 - 125

Lab Sample ID: 500-173369-12 DU
Matrix: Solid
Analysis Batch: 516578

Client Sample ID: 2615V2-A1-B25 (10-15)
Prep Type: TCLP
Prep Batch: 516250
RPD

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-516162/12-A
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 07:45	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-516162/13-A
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00213		mg/L		107	80 - 120

Lab Sample ID: LB 500-515596/1-B
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516162

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/19/19 10:10	11/20/19 07:48	1

Lab Sample ID: 500-173369-4 MS
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: 2615V2-01-B30 (12-18)
Prep Type: TCLP
Prep Batch: 516162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000988		mg/L		99	75 - 125

Lab Sample ID: 500-173369-4 MSD
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: 2615V2-01-B30 (12-18)
Prep Type: TCLP
Prep Batch: 516162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00020		0.00100	0.000885		mg/L		88	75 - 125	11	20

Lab Sample ID: 500-173369-4 DU
Matrix: Solid
Analysis Batch: 516412

Client Sample ID: 2615V2-01-B30 (12-18)
Prep Type: TCLP
Prep Batch: 516162

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00020			<0.00020		mg/L				NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-515957/12-A
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/18/19 14:20	11/19/19 08:36	1

Lab Sample ID: LCS 500-515957/13-A
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.161		mg/Kg		97	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-173369-9 MS
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: 2615V2-01-B51 (15-20)
Prep Type: Total/NA
Prep Batch: 515957
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.020		0.0967	0.108		mg/Kg	☼	91	75 - 125

Lab Sample ID: 500-173369-9 MSD
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: 2615V2-01-B51 (15-20)
Prep Type: Total/NA
Prep Batch: 515957
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.020		0.0970	0.108		mg/Kg	☼	90	75 - 125	0	20

Lab Sample ID: 500-173369-9 DU
Matrix: Solid
Analysis Batch: 516155

Client Sample ID: 2615V2-01-B51 (15-20)
Prep Type: Total/NA
Prep Batch: 515957
%Rec.

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.020		0.0207		mg/Kg	☼	3	20

Method: 9045D - pH

Lab Sample ID: 500-173369-1 DU
Matrix: Solid
Analysis Batch: 516019

Client Sample ID: 2615V2-01-B22 (0-7)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.9		7.9		SU		0	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Date Collected: 11/12/19 10:45

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:30	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 10:35	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:20	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 07:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019	(Start) 11/18/19 15:27 (End) 11/18/19 15:31	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B22 (0-7)

Lab Sample ID: 500-173369-1

Date Collected: 11/12/19 10:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 12:53	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 12:28	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 16:58	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 11:51	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:40	MJG	TAL CHI

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:43	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 10:39	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:23	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 07:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 15:35		
					(End)	11/18/19 15:39		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B30 (0-6)

Lab Sample ID: 500-173369-2

Date Collected: 11/12/19 11:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 13:18	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 12:51	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:02	EEN	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:43	MJG	TAL CHI

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Date Collected: 11/12/19 11:50

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:47	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 10:43	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:26	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 07:53	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 15:39		
					(End)	11/18/19 15:43		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (6-12)

Lab Sample ID: 500-173369-3

Date Collected: 11/12/19 11:50

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 13:44	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 14:00	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:06	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 11:55	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:49	MJG	TAL CHI

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:51	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 10:47	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:29	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 07:55	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019	(Start) 11/18/19 15:43 (End) 11/18/19 15:47	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 14:09	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 14:22	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:10	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B30 (12-18)

Lab Sample ID: 500-173369-4

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:00	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:51	MJG	TAL CHI

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 15:56	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 10:52	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:32	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:17	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 15:47		
					(End)	11/18/19 15:51		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B30 (12-18)D

Lab Sample ID: 500-173369-5

Date Collected: 11/12/19 11:55

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 14:35	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 14:45	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:14	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:04	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:53	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Date Collected: 11/12/19 12:30

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:00	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 10:56	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:35	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:20	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019	(Start) 11/18/19 15:51 (End) 11/18/19 15:55	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B51 (0-5)

Lab Sample ID: 500-173369-6

Date Collected: 11/12/19 12:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 15:01	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 15:08	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:18	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:08	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:55	MJG	TAL CHI

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:04	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 11:00	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:38	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:35	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 15:55		
					(End)	11/18/19 15:59		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B51 (5-10)

Lab Sample ID: 500-173369-7

Date Collected: 11/12/19 12:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 15:26	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 15:31	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:22	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:12	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 08:57	MJG	TAL CHI

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:08	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 11:05	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:41	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:37	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B51 (10-15)

Lab Sample ID: 500-173369-8

Date Collected: 11/12/19 12:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 18:51	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 15:54	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:26	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:16	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 09:00	MJG	TAL CHI

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Date Collected: 11/12/19 12:45

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:13	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 11:17	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:49	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:39	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 16:03		
					(End)	11/18/19 16:07		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-01-B51 (15-20)

Lab Sample ID: 500-173369-9

Date Collected: 11/12/19 12:45

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 19:17	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 16:17	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:30	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:21	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 09:02	MJG	TAL CHI

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:17	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 11:22	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:52	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:41	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019	(Start) 11/18/19 16:11 (End) 11/18/19 16:15	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 19:42	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 16:40	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:42	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (0-5)

Lab Sample ID: 500-173369-10

Date Collected: 11/12/19 14:30

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:25	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 09:14	MJG	TAL CHI

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Date Collected: 11/12/19 14:35

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:21	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 11:26	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:55	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:42	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 16:15		
					(End)	11/18/19 16:19		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-A1-B25 (5-10)

Lab Sample ID: 500-173369-11

Date Collected: 11/12/19 14:35

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 20:08	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 17:03	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:46	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:38	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 09:17	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Date Collected: 11/12/19 14:40

Matrix: Solid

Date Received: 11/12/19 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515593	11/15/19 11:10	GCA	TAL CHI
SPLP East	Prep	3010A			516247	11/19/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 16:34	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6010B		1	516528	11/20/19 11:30	EEN	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	3010A			516250	11/19/19 15:54	BDE	TAL CHI
TCLP	Analysis	6020A		1	516578	11/20/19 16:58	FXG	TAL CHI
TCLP	Leach	1311			515596	11/15/19 11:10	GCA	TAL CHI
TCLP	Prep	7470A			516162	11/19/19 10:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	516412	11/20/19 08:44	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516019		MTB	TAL CHI
					(Start)	11/18/19 16:19		
					(End)	11/18/19 16:23		
Total/NA	Analysis	Moisture		1	515387	11/14/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-A1-B25 (10-15)

Lab Sample ID: 500-173369-12

Date Collected: 11/12/19 14:40

Matrix: Solid

Date Received: 11/12/19 16:20

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515817	11/12/19 16:52	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 20:33	PMF	TAL CHI
Total/NA	Prep	3541			516409	11/20/19 10:21	DAK	TAL CHI
Total/NA	Analysis	8270D		1	517148	11/25/19 17:26	AJD	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517103	11/22/19 17:50	EEN	TAL CHI
Total/NA	Prep	3050B			516711	11/21/19 17:31	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517232	11/25/19 12:42	JEF	TAL CHI
Total/NA	Prep	7471B			515957	11/18/19 14:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516155	11/19/19 09:19	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173369-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 61
Phone: 708.534.5200 Fax: 708.534.5200



500-173369 COC

Report To (optional)
Contact: D. TEEBOUT
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173369

Chain of Custody Number: _____

Page 1 of 2

Temperature °C of Cooler: 5.8/6.2

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
<u>ENE</u>		<u>1009341.0447.01</u>								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix		Comments	
<u>176-001-047E</u>				Date Time							
Project Location/State		Lab PM									
<u>CHICAGO IL</u>		<u>R. WRIGHT</u>									
Sampler											
<u>A. HAPPEL</u>											
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
							<u>VOCs (82605)</u>	<u>SVOCs (82701)</u>	<u>TOTAL METALS</u>	<u>PH (60103/60204)</u>	<u>TCUP METALS (131/6005/6006/7471B)</u>
<u>1</u>		<u>2615V2-01-B22(0-7)</u>	<u>11/12/19</u>	<u>1045</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>2</u>		<u>2615V2-01-B30(0-6)</u>	<u>11/12/19</u>	<u>1145</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>3</u>		<u>2615V2-01-B30(6-2)</u>	<u>11/12/19</u>	<u>1150</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>4</u>		<u>2615V2-01-B30(12-18)</u>	<u>11/12/19</u>	<u>1155</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>5</u>		<u>2615V2-01-B30(12-18)DUP</u>	<u>11/12/19</u>	<u>1155</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>6</u>		<u>2615V2-01-B51(0-5)</u>	<u>11/12/19</u>	<u>1230</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>7</u>		<u>2615V2-01-B51(5-10)</u>	<u>11/12/19</u>	<u>1235</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>8</u>		<u>2615V2-01-B51(10-15)</u>	<u>11/12/19</u>	<u>1240</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>9</u>		<u>2615V2-01-B51(15-20)</u>	<u>11/12/19</u>	<u>1245</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company <u>ENE</u>	Date <u>11/12/19</u>	Time <u>1510</u>	Received By <u>[Signature]</u> Company <u>TA</u>	Date <u>11/12/19</u>	Time <u>1570</u>	Lab Courier <u>TA</u>
Relinquished By <u>[Signature]</u> Company <u>TA</u>	Date <u>11/12/19</u>	Time <u>1445</u>	Received By <u>[Signature]</u> Company <u>TA-CRE</u>	Date <u>11/12/19</u>	Time <u>1420</u>	Shipped
Relinquished By <u>[Signature]</u> Company <u>TA</u>	Date <u>11/12/19</u>	Time <u>1600</u>	Received By <u>[Signature]</u> Company <u>TA-CRE</u>	Date <u>11/12/19</u>	Time <u>1420</u>	Hand Delivered

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: D. TIEBOUT
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173369
 Chain of Custody Number: _____
 Page 2 of 2
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Lab Project #		Matrix		Matrix		Matrix		
Project Location/State		Lab Project #		Matrix		Matrix		Matrix		
Sampler		Lab PM		Matrix		Matrix		Matrix		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Matrix	Matrix	Matrix	Comments
ENE		1009341.0447.01								
17C-601-047E										
CHICAGO, IL										
A. HAPPEL										
10		2615V2-AI-B25(0-5)	11/14/19	1430	2	S	VOCs (826003) 5035	SVOCs (82701)	TOTAL METALS, PH (60103) (60200) (74715)	
11		2615V2-AI-B25(5-10)	11/14/19	1435	2	S				
12		2615V2-AI-B25(10-15)	11/14/19	1440	2	S				

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>EAE</u> Date: <u>11/12/19</u> Time: <u>1510</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/12/19</u> Time: <u>1510</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/12/19</u> Time: <u>1620</u>	Received By: <u>[Signature]</u> Company: <u>TA-CHT</u> Date: <u>11/12/19</u> Time: <u>1620</u>
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173369-1

Login Number: 173369

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	5.8,6.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173437-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
11/27/2019 4:26:19 PM
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Job ID: 500-173437-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173437-1

Receipt

The samples were received on 11/13/2019 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 6.1° C and 6.8° C.

GC/MS VOA

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 516539 recovered outside control limits for Chloroethane. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported. 2615V2-AI-B04 (12-18) (500-173437-13), 2615V2-AI-B04 (18-24) (500-173437-14) and 2615V2-AI-B04 (24-30) (500-173437-15)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-516538 and analytical batch 500-516803 recovered outside control limits for the following analyte: 2,2'-oxybis[1-chloropropane]. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0097	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.064		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.020	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.56	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.4		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.57	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.81		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000		11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	20	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	34		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.7	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.8		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.077	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024	B	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.025	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.079		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.6		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	25000		11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	19	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	18		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	38		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	24000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	15000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (6-12) (Continued)

Lab Sample ID: 500-173437-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	46		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.76		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	480		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.079		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.016	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030	B	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.032	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.053		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.50	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.74		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.46	J	0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.085	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.019	J	0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (12-18) (Continued)

Lab Sample ID: 500-173437-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.023	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.018	0.0079	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.053		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.41	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.6	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	45		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.85		0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.91		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	800		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.093	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023	B	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.048	J	0.083	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	14		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (24-30) (Continued)

Lab Sample ID: 500-173437-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.11	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	49000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2400		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.53	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.81		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.025	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.020	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025	B	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.033	J	0.035	0.0055	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.036	J	0.071	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.027	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.22		0.035	0.0049	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.051		0.035	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.21		0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.19		0.035	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.079		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.10		0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.085		0.035	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.084		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.082		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.034	J	0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.56	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.0		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	18		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	11		2.7	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000		110	19	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (0-6) (Continued)

Lab Sample ID: 500-173437-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	7.5	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	8800		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	62000		55	27	mg/Kg	10	☼	6010B	Total/NA
Manganese	230		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	14		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.1		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	430		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.31	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.2		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	24		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.0081		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.067	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.0077		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.031		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.037	B	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.026	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.094		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.014	J	0.041	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.78		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	41000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	34		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	41		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.90		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (6-12) (Continued)

Lab Sample ID: 500-173437-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	2.3		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	450		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.084		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.035		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.027	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.073		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.5		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.76		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.84		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.75		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.016	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020	B	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.041	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.095		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.51	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.3		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.58	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.094	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.016	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021	B	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.047	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.55	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.1	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (24-30) (Continued)

Lab Sample ID: 500-173437-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.93		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020	B	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.098		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.013	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.028	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.088	J	0.20	0.071	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.6		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.075	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000		12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	18	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	36		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	22000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	40		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.72		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.8		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	520		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.46	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.062	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (0-6) (Continued)

Lab Sample ID: 500-173437-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.026	B	0.019	0.0063	mg/Kg	1	*	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.040		0.018	0.0079	mg/Kg	1	*	8260B	Total/NA
2-Methylnaphthalene	0.048	J	0.079	0.0072	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.15		0.039	0.0055	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.022	J	0.039	0.0078	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.036	J	0.039	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.64	J	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	9.8		0.59	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	30		0.59	0.067	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.64		0.24	0.055	mg/Kg	1	*	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.16	B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA
Calcium	40000		120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	16	B	0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Cobalt	16		0.29	0.077	mg/Kg	1	*	6010B	Total/NA
Copper	38		0.59	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	*	6010B	Total/NA
Lead	17		0.29	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	19000		5.9	2.9	mg/Kg	1	*	6010B	Total/NA
Manganese	310		0.59	0.085	mg/Kg	1	*	6010B	Total/NA
Nickel	41		0.59	0.17	mg/Kg	1	*	6010B	Total/NA
Potassium	2500		29	10	mg/Kg	1	*	6010B	Total/NA
Selenium	0.62		0.59	0.35	mg/Kg	1	*	6010B	Total/NA
Silver	2.2		0.29	0.076	mg/Kg	1	*	6010B	Total/NA
Sodium	340		59	8.7	mg/Kg	1	*	6010B	Total/NA
Thallium	1.1		0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Vanadium	19		0.29	0.069	mg/Kg	1	*	6010B	Total/NA
Zinc	50		1.2	0.52	mg/Kg	1	*	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.044		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.10		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023	B	0.019	0.0063	mg/Kg	1	*	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.032	J	0.082	0.0075	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.063		0.041	0.0057	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.020	J	0.041	0.011	mg/Kg	1	*	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (12-18) (Continued)

Lab Sample ID: 500-173437-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.45	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.78		0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.77		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.015	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024	B	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.045	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.025	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.089	J	0.20	0.072	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.53	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	16		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (18-24) (Continued)

Lab Sample ID: 500-173437-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	330		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.97		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		60	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.085	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.019	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022	B	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0079	J	0.018	0.0078	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00091	J	0.0036	0.00057	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.048	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.022	J	0.041	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.49	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	J	0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.67		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (24-30) (Continued)

Lab Sample ID: 500-173437-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.021	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022	B	0.020	0.0068	mg/Kg	1	*	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173437-1	2615V2-AI-B23 (0-6)	Solid	11/13/19 11:00	11/13/19 15:50	
500-173437-2	2615V2-AI-B23 (6-12)	Solid	11/13/19 11:05	11/13/19 15:50	
500-173437-3	2615V2-AI-B23 (12-18)	Solid	11/13/19 11:10	11/13/19 15:50	
500-173437-4	2615V2-AI-B23 (18-24)	Solid	11/13/19 11:15	11/13/19 15:50	
500-173437-5	2615V2-AI-B23 (24-30)	Solid	11/13/19 11:20	11/13/19 15:50	
500-173437-6	2615V2-AI-B12 (0-6)	Solid	11/13/19 12:40	11/13/19 15:50	
500-173437-7	2615V2-AI-B12 (6-12)	Solid	11/13/19 12:45	11/13/19 15:50	
500-173437-8	2615V2-AI-B12 (12-18)	Solid	11/13/19 12:50	11/13/19 15:50	
500-173437-9	2615V2-AI-B12 (18-24)	Solid	11/13/19 12:55	11/13/19 15:50	
500-173437-10	2615V2-AI-B12 (24-30)	Solid	11/13/19 13:00	11/13/19 15:50	
500-173437-11	2615V2-AI-B04 (0-6)	Solid	11/13/19 14:20	11/13/19 15:50	
500-173437-12	2615V2-AI-B04 (6-12)	Solid	11/13/19 14:25	11/13/19 15:50	
500-173437-13	2615V2-AI-B04 (12-18)	Solid	11/13/19 14:30	11/13/19 15:50	
500-173437-14	2615V2-AI-B04 (18-24)	Solid	11/13/19 14:35	11/13/19 15:50	
500-173437-15	2615V2-AI-B04 (24-30)	Solid	11/13/19 14:40	11/13/19 15:50	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Date Collected: 11/13/19 11:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0097	J	0.017	0.0076	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Carbon disulfide	<0.0044		0.0044	0.00090	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Chloromethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/13/19 17:24	11/20/19 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 131	11/13/19 17:24	11/20/19 20:58	1
Dibromofluoromethane	93		75 - 126	11/13/19 17:24	11/20/19 20:58	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/13/19 17:24	11/20/19 20:58	1
Toluene-d8 (Surr)	94		75 - 124	11/13/19 17:24	11/20/19 20:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Date Collected: 11/13/19 11:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Phenanthrene	0.064		0.040	0.0056	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Date Collected: 11/13/19 11:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.020	J	0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	91		31 - 166				11/21/19 07:55	11/25/19 15:14	1
Phenol-d5	77		30 - 153				11/21/19 07:55	11/25/19 15:14	1
Nitrobenzene-d5	71		37 - 147				11/21/19 07:55	11/25/19 15:14	1
2-Fluorobiphenyl	83		43 - 145				11/21/19 07:55	11/25/19 15:14	1
2,4,6-Tribromophenol	82		31 - 143				11/21/19 07:55	11/25/19 15:14	1
Terphenyl-d14	91		42 - 157				11/21/19 07:55	11/25/19 15:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.1	0.22	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Arsenic	5.4		0.57	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Barium	32		0.57	0.066	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Beryllium	0.81		0.23	0.054	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Boron	17		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Cadmium	0.12	B	0.11	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Calcium	29000		11	1.9	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Chromium	20	B	0.57	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Cobalt	12		0.29	0.075	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Copper	34		0.57	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Iron	17000		11	6.0	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Lead	18		0.29	0.13	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Magnesium	18000		5.7	2.9	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Manganese	250		0.57	0.083	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Nickel	38		0.57	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Potassium	3200		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Selenium	0.52	J	0.57	0.34	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Silver	2.8		0.29	0.074	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Sodium	1100		57	8.5	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Thallium	1.0		0.57	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Vanadium	21		0.29	0.068	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1
Zinc	55		1.1	0.50	mg/Kg	☼	11/22/19 17:38	11/25/19 17:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:13	1
Boron	0.077	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Date Collected: 11/13/19 11:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:13	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:13	1
Cobalt	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:13	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:13	1
Manganese	2.2		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:13	1
Nickel	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:13	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:13	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:13	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.2		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:04	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	B	0.020	0.0066	mg/Kg	☼	11/19/19 14:35	11/20/19 07:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			11/20/19 13:53	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/13/19 17:24	11/20/19 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 131	11/13/19 17:24	11/20/19 21:24	1
Dibromofluoromethane	92		75 - 126	11/13/19 17:24	11/20/19 21:24	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/13/19 17:24	11/20/19 21:24	1
Toluene-d8 (Surr)	94		75 - 124	11/13/19 17:24	11/20/19 21:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2-Methylnaphthalene	0.025	J	0.081	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Phenanthrene	0.079		0.040	0.0056	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	76		31 - 166				11/21/19 07:55	11/25/19 15:41	1
Phenol-d5	69		30 - 153				11/21/19 07:55	11/25/19 15:41	1
Nitrobenzene-d5	61		37 - 147				11/21/19 07:55	11/25/19 15:41	1
2-Fluorobiphenyl	72		43 - 145				11/21/19 07:55	11/25/19 15:41	1
2,4,6-Tribromophenol	68		31 - 143				11/21/19 07:55	11/25/19 15:41	1
Terphenyl-d14	83		42 - 157				11/21/19 07:55	11/25/19 15:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.1	0.22	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Arsenic	9.6		0.56	0.19	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Barium	32		0.56	0.064	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Beryllium	0.70		0.22	0.052	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Boron	18		2.8	0.26	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Cadmium	0.13	B	0.11	0.020	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Calcium	25000		11	1.9	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Chromium	19	B	0.56	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Cobalt	18		0.28	0.074	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Copper	38		0.56	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Iron	24000		11	5.8	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Lead	21		0.28	0.13	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Magnesium	15000		5.6	2.8	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Manganese	270		0.56	0.081	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Nickel	46		0.56	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Potassium	3300		28	9.9	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Selenium	0.76		0.56	0.33	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Silver	2.5		0.28	0.072	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Sodium	480		56	8.3	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Thallium	1.3		0.56	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Vanadium	22		0.28	0.066	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1
Zinc	50		1.1	0.49	mg/Kg	☼	11/22/19 17:38	11/25/19 17:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.43	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:18	1
Boron	0.070	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0024	J	0.0050	0.0020	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Cobalt	0.035		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Iron	<0.40		0.40	0.20	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Manganese	2.1		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Nickel	0.079		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Silver	<0.025		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 12:18	1
Zinc	<0.50		0.50	0.020	mg/L	-	11/20/19 16:20	11/27/19 12:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.016	J	0.025	0.010	mg/L	-	11/19/19 16:00	11/20/19 12:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/20/19 16:20	11/23/19 12:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/20/19 16:20	11/23/19 12:02	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/20/19 09:25	11/21/19 07:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030	B	0.020	0.0066	mg/Kg	☼	11/19/19 14:35	11/20/19 07:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU	-		11/20/19 13:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Date Collected: 11/13/19 11:10

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,2-Dichloropropene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 03:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/13/19 17:24	11/21/19 03:54	1
Dibromofluoromethane	97		75 - 126	11/13/19 17:24	11/21/19 03:54	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/13/19 17:24	11/21/19 03:54	1
Toluene-d8 (Surr)	97		75 - 124	11/13/19 17:24	11/21/19 03:54	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Date Collected: 11/13/19 11:10

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2-Methylnaphthalene	0.032	J	0.081	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Phenanthrene	0.053		0.040	0.0056	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Date Collected: 11/13/19 11:10

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 11:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		31 - 166				11/21/19 07:55	11/25/19 11:08	1
Phenol-d5	77		30 - 153				11/21/19 07:55	11/25/19 11:08	1
Nitrobenzene-d5	75		37 - 147				11/21/19 07:55	11/25/19 11:08	1
2-Fluorobiphenyl	85		43 - 145				11/21/19 07:55	11/25/19 11:08	1
2,4,6-Tribromophenol	62		31 - 143				11/21/19 07:55	11/25/19 11:08	1
Terphenyl-d14	87		42 - 157				11/21/19 07:55	11/25/19 11:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.50	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Arsenic	7.5		0.59	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Barium	39		0.59	0.067	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Beryllium	0.74		0.23	0.055	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Boron	18		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Calcium	54000		120	20	mg/Kg	☼	11/22/19 17:38	11/26/19 12:16	10
Chromium	18	B	0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Cobalt	14		0.29	0.077	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Copper	29		0.59	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Iron	20000		12	6.1	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Lead	14		0.29	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Manganese	350		0.59	0.085	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Nickel	36		0.59	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Potassium	2900		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Selenium	0.46	J	0.59	0.34	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Silver	2.4		0.29	0.076	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Sodium	170		59	8.7	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Thallium	1.0		0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Vanadium	21		0.29	0.069	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1
Zinc	51		1.2	0.51	mg/Kg	☼	11/22/19 17:38	11/25/19 18:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:22	1
Boron	0.085	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Date Collected: 11/13/19 11:10

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:22	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:22	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:22	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:22	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:22	1
Nickel	0.038		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:22	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:22	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:22	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:22	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.019	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:21	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	B	0.019	0.0062	mg/Kg	☼	11/19/19 14:35	11/20/19 07:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/20/19 13:57	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.021		0.018	0.0079	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 04:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/13/19 17:24	11/21/19 04:19	1
Dibromofluoromethane	95		75 - 126	11/13/19 17:24	11/21/19 04:19	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/13/19 17:24	11/21/19 04:19	1
Toluene-d8 (Surr)	98		75 - 124	11/13/19 17:24	11/21/19 04:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Phenanthrene	0.053		0.041	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.012	J	0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 10:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		31 - 166				11/21/19 07:55	11/25/19 10:42	1
Phenol-d5	86		30 - 153				11/21/19 07:55	11/25/19 10:42	1
Nitrobenzene-d5	80		37 - 147				11/21/19 07:55	11/25/19 10:42	1
2-Fluorobiphenyl	91		43 - 145				11/21/19 07:55	11/25/19 10:42	1
2,4,6-Tribromophenol	73		31 - 143				11/21/19 07:55	11/25/19 10:42	1
Terphenyl-d14	93		42 - 157				11/21/19 07:55	11/25/19 10:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.2	0.24	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Arsenic	7.5		0.62	0.21	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Barium	37		0.62	0.071	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Beryllium	0.66		0.25	0.058	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Boron	19		3.1	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Cadmium	1.6	B	0.12	0.022	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Calcium	53000		120	21	mg/Kg	☼	11/22/19 17:38	11/26/19 12:20	10
Chromium	19	B	0.62	0.31	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Cobalt	14		0.31	0.081	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Copper	45		0.62	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Iron	20000		12	6.5	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Lead	13		0.31	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Manganese	320		0.62	0.090	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Nickel	36		0.62	0.18	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Potassium	3100		31	11	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Selenium	0.85		0.62	0.36	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Silver	2.5		0.31	0.080	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Sodium	190		62	9.2	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Thallium	0.91		0.62	0.31	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Vanadium	22		0.31	0.073	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1
Zinc	800		1.2	0.54	mg/Kg	☼	11/22/19 17:38	11/25/19 18:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:27	1
Boron	0.093	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:27	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:27	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:27	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:27	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:27	1
Nickel	0.040		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:27	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:27	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:27	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:26	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:04	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	B	0.019	0.0063	mg/Kg	☼	11/19/19 14:35	11/20/19 07:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/20/19 13:59	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Date Collected: 11/13/19 11:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/13/19 17:24	11/21/19 04:44	1
Dibromofluoromethane	96		75 - 126	11/13/19 17:24	11/21/19 04:44	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/13/19 17:24	11/21/19 04:44	1
Toluene-d8 (Surr)	99		75 - 124	11/13/19 17:24	11/21/19 04:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Date Collected: 11/13/19 11:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2-Methylnaphthalene	0.048	J	0.083	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Phenanthrene	0.11		0.041	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Pyrene	0.019	J	0.041	0.0081	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Date Collected: 11/13/19 11:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.031	J	0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 16:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		31 - 166				11/21/19 07:55	11/25/19 16:08	1
Phenol-d5	69		30 - 153				11/21/19 07:55	11/25/19 16:08	1
Nitrobenzene-d5	64		37 - 147				11/21/19 07:55	11/25/19 16:08	1
2-Fluorobiphenyl	74		43 - 145				11/21/19 07:55	11/25/19 16:08	1
2,4,6-Tribromophenol	47		31 - 143				11/21/19 07:55	11/25/19 16:08	1
Terphenyl-d14	79		42 - 157				11/21/19 07:55	11/25/19 16:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.2	0.24	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Arsenic	7.5		0.61	0.21	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Barium	36		0.61	0.069	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Beryllium	0.58		0.24	0.057	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Boron	14		3.0	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Cadmium	0.11	J B	0.12	0.022	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Calcium	49000		120	21	mg/Kg	☼	11/22/19 17:38	11/26/19 12:24	10
Chromium	16	B	0.61	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Cobalt	14		0.30	0.079	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Copper	30		0.61	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Iron	20000		12	6.3	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Lead	14		0.30	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Magnesium	22000		6.1	3.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Manganese	320		0.61	0.088	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Nickel	36		0.61	0.18	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Potassium	2400		30	11	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Selenium	0.53	J	0.61	0.36	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Silver	2.3		0.30	0.078	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Sodium	180		61	9.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Thallium	0.81		0.61	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Vanadium	18		0.30	0.071	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1
Zinc	53		1.2	0.53	mg/Kg	☼	11/22/19 17:38	11/25/19 18:16	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:32	1
Boron	0.13	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Date Collected: 11/13/19 11:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:32	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:32	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:32	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:32	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:32	1
Nickel	0.039		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:32	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:32	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:32	1
Zinc	0.025	J	0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.020	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:05	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025	B	0.020	0.0065	mg/Kg	☼	11/19/19 14:35	11/20/19 07:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/20/19 14:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Date Collected: 11/13/19 12:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 90.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,3-Dichloropropane, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	11/13/19 17:24	11/21/19 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		75 - 131	11/13/19 17:24	11/21/19 05:10	1
Dibromofluoromethane	95		75 - 126	11/13/19 17:24	11/21/19 05:10	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/13/19 17:24	11/21/19 05:10	1
Toluene-d8 (Surr)	102		75 - 124	11/13/19 17:24	11/21/19 05:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Date Collected: 11/13/19 12:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 90.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,2'-oxybis[1-chloropropane]	<0.18	*	0.18	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Naphthalene	0.033	J	0.035	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2-Methylnaphthalene	0.036	J	0.071	0.0065	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Fluorene	0.027	J	0.035	0.0050	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Phenanthrene	0.22		0.035	0.0049	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Anthracene	0.051		0.035	0.0059	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Fluoranthene	0.21		0.035	0.0066	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Pyrene	0.19		0.035	0.0070	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Benzo[a]anthracene	0.079		0.035	0.0048	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Date Collected: 11/13/19 12:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 90.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.10		0.035	0.0097	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Benzo[b]fluoranthene	0.085		0.035	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Benzo[k]fluoranthene	0.084		0.035	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Benzo[a]pyrene	0.082		0.035	0.0069	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Indeno[1,2,3-cd]pyrene	0.034 J		0.035	0.0092	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
Benzo[g,h,i]perylene	0.024 J		0.035	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/21/19 07:55	11/25/19 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		31 - 166	11/21/19 07:55	11/25/19 16:35	1
Phenol-d5	69		30 - 153	11/21/19 07:55	11/25/19 16:35	1
Nitrobenzene-d5	68		37 - 147	11/21/19 07:55	11/25/19 16:35	1
2-Fluorobiphenyl	79		43 - 145	11/21/19 07:55	11/25/19 16:35	1
2,4,6-Tribromophenol	69		31 - 143	11/21/19 07:55	11/25/19 16:35	1
Terphenyl-d14	81		42 - 157	11/21/19 07:55	11/25/19 16:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56 J		1.1	0.21	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Arsenic	3.0		0.55	0.19	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Barium	18		0.55	0.062	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Beryllium	0.41		0.22	0.051	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Boron	11		2.7	0.26	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Cadmium	0.10 J B		0.11	0.020	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Calcium	110000		110	19	mg/Kg	☼	11/22/19 17:38	11/26/19 12:28	10
Chromium	7.5 B		0.55	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Cobalt	5.8		0.27	0.072	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Copper	12		0.55	0.15	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Iron	8800		11	5.7	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Lead	16		0.27	0.13	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Magnesium	62000		55	27	mg/Kg	☼	11/22/19 17:38	11/26/19 12:28	10
Manganese	230		0.55	0.079	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Nickel	14		0.55	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Potassium	1300		27	9.7	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Selenium	0.52 J		0.55	0.32	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Silver	1.1		0.27	0.071	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Sodium	430		55	8.1	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Thallium	0.31 J		0.55	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Vanadium	9.2		0.27	0.065	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1
Zinc	24		1.1	0.48	mg/Kg	☼	11/22/19 17:38	11/25/19 18:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.55		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:36	1
Boron	0.064 J		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Date Collected: 11/13/19 12:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 90.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:36	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:36	1
Cobalt	0.022	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:36	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:36	1
Lead	0.0081		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:36	1
Manganese	1.9		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:36	1
Nickel	0.036		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:36	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:36	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:36	1
Zinc	0.067	J	0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:36	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0077		0.0075	0.0075	mg/L		11/19/19 16:00	11/20/19 12:34	1
Manganese	0.031		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:06	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	B	0.017	0.0058	mg/Kg	☼	11/19/19 14:35	11/20/19 08:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/20/19 14:05	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 05:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 131	11/13/19 17:24	11/21/19 05:35	1
Dibromofluoromethane	93		75 - 126	11/13/19 17:24	11/21/19 05:35	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/13/19 17:24	11/21/19 05:35	1
Toluene-d8 (Surr)	102		75 - 124	11/13/19 17:24	11/21/19 05:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2-Methylnaphthalene	0.026	J	0.084	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Phenanthrene	0.094		0.041	0.0058	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Benzo[a]anthracene	0.014	J	0.041	0.0056	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.012	J	0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				11/21/19 07:55	11/25/19 17:02	1
Phenol-d5	56		30 - 153				11/21/19 07:55	11/25/19 17:02	1
Nitrobenzene-d5	54		37 - 147				11/21/19 07:55	11/25/19 17:02	1
2-Fluorobiphenyl	65		43 - 145				11/21/19 07:55	11/25/19 17:02	1
2,4,6-Tribromophenol	48		31 - 143				11/21/19 07:55	11/25/19 17:02	1
Terphenyl-d14	70		42 - 157				11/21/19 07:55	11/25/19 17:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.1	0.22	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Arsenic	8.1		0.57	0.19	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Barium	33		0.57	0.065	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Beryllium	0.78		0.23	0.053	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Boron	15		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Cadmium	0.11	B	0.11	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Calcium	41000		110	19	mg/Kg	☼	11/22/19 17:38	11/26/19 12:40	10
Chromium	18	B	0.57	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Cobalt	16		0.29	0.075	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Copper	34		0.57	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Iron	21000		11	5.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Lead	17		0.29	0.13	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Magnesium	20000		5.7	2.8	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Manganese	300		0.57	0.083	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Nickel	41		0.57	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Potassium	2800		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Selenium	0.90		0.57	0.34	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Silver	2.3		0.29	0.074	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Sodium	450		57	8.4	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Thallium	0.89		0.57	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Vanadium	20		0.29	0.067	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1
Zinc	49		1.1	0.50	mg/Kg	☼	11/22/19 17:38	11/25/19 18:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:41	1
Boron	0.070	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:41	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:41	1
Cobalt	0.038		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:41	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:41	1
Manganese	2.3		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:41	1
Nickel	0.084		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:41	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:41	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:41	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.035		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:39	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	B	0.019	0.0062	mg/Kg	☼	11/19/19 14:35	11/20/19 08:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/20/19 14:06	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/13/19 17:24	11/21/19 06:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	11/13/19 17:24	11/21/19 06:00	1
Dibromofluoromethane	97		75 - 126	11/13/19 17:24	11/21/19 06:00	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/13/19 17:24	11/21/19 06:00	1
Toluene-d8 (Surr)	98		75 - 124	11/13/19 17:24	11/21/19 06:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2-Methylnaphthalene	0.027	J	0.082	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Phenanthrene	0.073		0.040	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		31 - 166				11/21/19 07:55	11/25/19 17:29	1
Phenol-d5	68		30 - 153				11/21/19 07:55	11/25/19 17:29	1
Nitrobenzene-d5	64		37 - 147				11/21/19 07:55	11/25/19 17:29	1
2-Fluorobiphenyl	75		43 - 145				11/21/19 07:55	11/25/19 17:29	1
2,4,6-Tribromophenol	40		31 - 143				11/21/19 07:55	11/25/19 17:29	1
Terphenyl-d14	77		42 - 157				11/21/19 07:55	11/25/19 17:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Arsenic	8.5		0.60	0.21	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Barium	41		0.60	0.068	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Beryllium	0.76		0.24	0.056	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Boron	18		3.0	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Cadmium	0.13	B	0.12	0.022	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Calcium	51000		120	20	mg/Kg	☼	11/22/19 17:38	11/26/19 12:44	10
Chromium	19	B	0.60	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Cobalt	15		0.30	0.079	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Copper	30		0.60	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Iron	20000		12	6.2	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Lead	15		0.30	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Magnesium	22000		6.0	3.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Manganese	330		0.60	0.087	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Nickel	37		0.60	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Potassium	3000		30	11	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Selenium	0.84		0.60	0.35	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Silver	2.5		0.30	0.077	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Sodium	180		60	8.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Thallium	0.87		0.60	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Vanadium	21		0.30	0.071	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1
Zinc	52		1.2	0.53	mg/Kg	☼	11/22/19 17:38	11/25/19 18:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.75		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:45	1
Boron	0.084	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:45	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:45	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:45	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:45	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:45	1
Nickel	0.041		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:45	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:45	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:45	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:45	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.016	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:43	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:08	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	B	0.020	0.0065	mg/Kg	☼	11/19/19 14:35	11/20/19 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/20/19 14:08	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Date Collected: 11/13/19 12:55

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.030		0.030	0.013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Benzene	<0.0030		0.0030	0.00076	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Bromodichloromethane	<0.0030		0.0030	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Bromoform	<0.0030		0.0030	0.00087	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Bromomethane	<0.0075		0.0075	0.0028	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
2-Butanone (MEK)	<0.0075		0.0075	0.0033	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Carbon disulfide	<0.0075		0.0075	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Carbon tetrachloride	<0.0030		0.0030	0.00087	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Chlorobenzene	<0.0030		0.0030	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Chloroethane	<0.0075		0.0075	0.0022	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Chloroform	<0.0030		0.0030	0.0010	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Chloromethane	<0.0075		0.0075	0.0030	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
cis-1,2-Dichloroethene	<0.0030		0.0030	0.00084	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
cis-1,3-Dichloropropene	<0.0030		0.0030	0.00090	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Dibromochloromethane	<0.0030		0.0030	0.00098	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,1-Dichloroethane	<0.0030		0.0030	0.0010	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,2-Dichloroethane	<0.0075		0.0075	0.0023	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,1-Dichloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,2-Dichloropropane	<0.0030		0.0030	0.00077	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,3-Dichloropropane, Total	<0.0030		0.0030	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Ethylbenzene	<0.0030		0.0030	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
2-Hexanone	<0.0075		0.0075	0.0023	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Methylene Chloride	<0.0075		0.0075	0.0029	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
4-Methyl-2-pentanone (MIBK)	<0.0075		0.0075	0.0022	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Methyl tert-butyl ether	<0.0030		0.0030	0.00088	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Styrene	<0.0030		0.0030	0.00090	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,1,2,2-Tetrachloroethane	<0.0030		0.0030	0.00096	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Tetrachloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Toluene	<0.0030		0.0030	0.00076	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
trans-1,2-Dichloroethene	<0.0030		0.0030	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
trans-1,3-Dichloropropene	<0.0030		0.0030	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,1,1-Trichloroethane	<0.0030		0.0030	0.0010	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
1,1,2-Trichloroethane	<0.0030		0.0030	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Trichloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Vinyl acetate	<0.0075		0.0075	0.0026	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Vinyl chloride	<0.0030		0.0030	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1
Xylenes, Total	<0.0060		0.0060	0.00096	mg/Kg	☼	11/13/19 17:24	11/21/19 06:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	11/13/19 17:24	11/21/19 06:26	1
Dibromofluoromethane	94		75 - 126	11/13/19 17:24	11/21/19 06:26	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/13/19 17:24	11/21/19 06:26	1
Toluene-d8 (Surr)	97		75 - 124	11/13/19 17:24	11/21/19 06:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Date Collected: 11/13/19 12:55

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2-Methylnaphthalene	0.041	J	0.082	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Phenanthrene	0.095		0.040	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Date Collected: 11/13/19 12:55

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	76		31 - 166				11/21/19 07:55	11/25/19 17:56	1
Phenol-d5	66		30 - 153				11/21/19 07:55	11/25/19 17:56	1
Nitrobenzene-d5	71		37 - 147				11/21/19 07:55	11/25/19 17:56	1
2-Fluorobiphenyl	85		43 - 145				11/21/19 07:55	11/25/19 17:56	1
2,4,6-Tribromophenol	52		31 - 143				11/21/19 07:55	11/25/19 17:56	1
Terphenyl-d14	83		42 - 157				11/21/19 07:55	11/25/19 17:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.2	0.24	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Arsenic	8.3		0.61	0.21	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Barium	39		0.61	0.069	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Beryllium	0.75		0.24	0.057	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Boron	17		3.0	0.28	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Cadmium	0.16	B	0.12	0.022	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Calcium	52000		120	21	mg/Kg	☼	11/22/19 17:38	11/26/19 12:48	10
Chromium	18	B	0.61	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Cobalt	14		0.30	0.079	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Copper	29		0.61	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Iron	21000		12	6.3	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Lead	14		0.30	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Magnesium	23000		6.1	3.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Manganese	360		0.61	0.088	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Nickel	36		0.61	0.18	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Potassium	2900		30	11	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Selenium	0.58	J	0.61	0.36	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Silver	2.4		0.30	0.078	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Sodium	180		61	9.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Thallium	0.71		0.61	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Vanadium	21		0.30	0.071	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1
Zinc	62		1.2	0.53	mg/Kg	☼	11/22/19 17:38	11/25/19 18:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:58	1
Boron	0.094	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Date Collected: 11/13/19 12:55

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 78.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:58	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:58	1
Cobalt	0.012	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:58	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:58	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:58	1
Nickel	0.037		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:58	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:58	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:58	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.016	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:47	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:11	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	B	0.019	0.0064	mg/Kg	☼	11/19/19 14:35	11/20/19 08:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/20/19 14:10	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.025		0.025	0.011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Benzene	<0.0025		0.0025	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Bromodichloromethane	<0.0025		0.0025	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Bromoform	<0.0025		0.0025	0.00073	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Bromomethane	<0.0062		0.0062	0.0023	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
2-Butanone (MEK)	<0.0062		0.0062	0.0028	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Carbon disulfide	<0.0062		0.0062	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Carbon tetrachloride	<0.0025		0.0025	0.00072	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Chlorobenzene	<0.0025		0.0025	0.00092	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Chloroethane	<0.0062		0.0062	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Chloroform	<0.0025		0.0025	0.00086	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Chloromethane	<0.0062		0.0062	0.0025	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00069	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00075	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Dibromochloromethane	<0.0025		0.0025	0.00081	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,1-Dichloroethane	<0.0025		0.0025	0.00085	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,2-Dichloroethane	<0.0062		0.0062	0.0019	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,1-Dichloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,2-Dichloropropane	<0.0025		0.0025	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,3-Dichloropropane, Total	<0.0025		0.0025	0.00087	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
2-Hexanone	<0.0062		0.0062	0.0019	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Methylene Chloride	<0.0062		0.0062	0.0024	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
4-Methyl-2-pentanone (MIBK)	<0.0062		0.0062	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00073	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Styrene	<0.0025		0.0025	0.00075	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00079	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Tetrachloroethene	<0.0025		0.0025	0.00085	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Toluene	<0.0025		0.0025	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00087	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,1,1-Trichloroethane	<0.0025		0.0025	0.00083	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Trichloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Vinyl acetate	<0.0062		0.0062	0.0022	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1
Xylenes, Total	<0.0050		0.0050	0.00080	mg/Kg	☼	11/13/19 17:24	11/21/19 06:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131	11/13/19 17:24	11/21/19 06:51	1
Dibromofluoromethane	94		75 - 126	11/13/19 17:24	11/21/19 06:51	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/13/19 17:24	11/21/19 06:51	1
Toluene-d8 (Surr)	99		75 - 124	11/13/19 17:24	11/21/19 06:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2-Methylnaphthalene	0.047	J	0.083	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Phenanthrene	0.11		0.041	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				11/21/19 07:55	11/25/19 18:24	1
Phenol-d5	56		30 - 153				11/21/19 07:55	11/25/19 18:24	1
Nitrobenzene-d5	54		37 - 147				11/21/19 07:55	11/25/19 18:24	1
2-Fluorobiphenyl	65		43 - 145				11/21/19 07:55	11/25/19 18:24	1
2,4,6-Tribromophenol	38		31 - 143				11/21/19 07:55	11/25/19 18:24	1
Terphenyl-d14	68		42 - 157				11/21/19 07:55	11/25/19 18:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Arsenic	7.8		0.59	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Barium	39		0.59	0.067	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Beryllium	0.73		0.23	0.055	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Boron	17		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Cadmium	0.12	B	0.12	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Calcium	51000		120	20	mg/Kg	☼	11/22/19 17:38	11/26/19 12:52	10
Chromium	18	B	0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Cobalt	15		0.29	0.077	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Copper	30		0.59	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Iron	21000		12	6.1	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Lead	15		0.29	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Magnesium	21000		5.9	2.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Manganese	330		0.59	0.085	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Nickel	37		0.59	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Potassium	2900		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Selenium	0.93		0.59	0.35	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Silver	2.3		0.29	0.076	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Sodium	180		59	8.7	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Thallium	1.0		0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Vanadium	21		0.29	0.069	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1
Zinc	52		1.2	0.52	mg/Kg	☼	11/22/19 17:38	11/25/19 18:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 13:03	1
Boron	0.12	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 13:03	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:03	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:03	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 13:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 13:03	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:03	1
Nickel	0.038		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:03	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 13:03	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:03	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 13:03	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.025		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 12:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:12	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	B	0.018	0.0061	mg/Kg	☼	11/19/19 14:35	11/20/19 08:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/20/19 14:12	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Date Collected: 11/13/19 14:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 82.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 07:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 131	11/13/19 17:24	11/21/19 07:17	1
Dibromofluoromethane	96		75 - 126	11/13/19 17:24	11/21/19 07:17	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/13/19 17:24	11/21/19 07:17	1
Toluene-d8 (Surr)	99		75 - 124	11/13/19 17:24	11/21/19 07:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Date Collected: 11/13/19 14:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 82.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Phenanthrene	0.098		0.039	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Pyrene	0.013 J		0.039	0.0077	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Benzof[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Date Collected: 11/13/19 14:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 82.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.028	J	0.039	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Bis(2-ethylhexyl) phthalate	0.088	J	0.20	0.071	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		31 - 166				11/21/19 07:55	11/25/19 18:51	1
Phenol-d5	70		30 - 153				11/21/19 07:55	11/25/19 18:51	1
Nitrobenzene-d5	66		37 - 147				11/21/19 07:55	11/25/19 18:51	1
2-Fluorobiphenyl	79		43 - 145				11/21/19 07:55	11/25/19 18:51	1
2,4,6-Tribromophenol	62		31 - 143				11/21/19 07:55	11/25/19 18:51	1
Terphenyl-d14	83		42 - 157				11/21/19 07:55	11/25/19 18:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Arsenic	8.6		0.58	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Barium	41		0.58	0.066	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Beryllium	0.77		0.23	0.054	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Boron	15		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Cadmium	0.075	J B	0.12	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Calcium	29000		12	2.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Chromium	18	B	0.58	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Cobalt	14		0.29	0.076	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Copper	36		0.58	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Iron	22000		12	6.0	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Lead	16		0.29	0.13	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Magnesium	17000		5.8	2.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Manganese	270		0.58	0.084	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Nickel	40		0.58	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Potassium	2900		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Selenium	0.72		0.58	0.34	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Silver	2.8		0.29	0.075	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Sodium	520		58	8.6	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Thallium	1.0		0.58	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Vanadium	20		0.29	0.068	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1
Zinc	53		1.2	0.51	mg/Kg	☼	11/22/19 17:38	11/25/19 18:40	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.46	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 13:07	1
Boron	0.062	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Date Collected: 11/13/19 14:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 82.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0022	J	0.0050	0.0020	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Cobalt	0.024	J	0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Iron	<0.40		0.40	0.20	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Manganese	2.6		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Nickel	0.040		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Silver	<0.025		0.025	0.010	mg/L	-	11/20/19 16:20	11/27/19 13:07	1
Zinc	<0.50		0.50	0.020	mg/L	-	11/20/19 16:20	11/27/19 13:07	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L	-	11/19/19 16:00	11/20/19 12:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/20/19 16:20	11/23/19 12:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/20/19 16:20	11/23/19 12:13	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/20/19 09:25	11/21/19 08:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	B	0.019	0.0063	mg/Kg	☼	11/19/19 14:35	11/20/19 08:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU	-		11/20/19 14:14	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Date Collected: 11/13/19 14:25

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.040		0.018	0.0079	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 07:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	11/13/19 17:24	11/21/19 07:42	1
Dibromofluoromethane	95		75 - 126	11/13/19 17:24	11/21/19 07:42	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/13/19 17:24	11/21/19 07:42	1
Toluene-d8 (Surr)	100		75 - 124	11/13/19 17:24	11/21/19 07:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Date Collected: 11/13/19 14:25

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2-Methylnaphthalene	0.048	J	0.079	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Phenanthrene	0.15		0.039	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Pyrene	0.022	J	0.039	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Date Collected: 11/13/19 14:25

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	J	0.039	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 19:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166				11/21/19 07:55	11/25/19 19:18	1
Phenol-d5	59		30 - 153				11/21/19 07:55	11/25/19 19:18	1
Nitrobenzene-d5	52		37 - 147				11/21/19 07:55	11/25/19 19:18	1
2-Fluorobiphenyl	64		43 - 145				11/21/19 07:55	11/25/19 19:18	1
2,4,6-Tribromophenol	48		31 - 143				11/21/19 07:55	11/25/19 19:18	1
Terphenyl-d14	80		42 - 157				11/21/19 07:55	11/25/19 19:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Arsenic	9.8		0.59	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Barium	30		0.59	0.067	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Beryllium	0.64		0.24	0.055	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Boron	14		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Calcium	40000		120	20	mg/Kg	☼	11/22/19 17:38	11/26/19 12:56	10
Chromium	16	B	0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Cobalt	16		0.29	0.077	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Copper	38		0.59	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Iron	20000		12	6.1	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Lead	17		0.29	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Magnesium	19000		5.9	2.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Manganese	310		0.59	0.085	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Nickel	41		0.59	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Potassium	2500		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Selenium	0.62		0.59	0.35	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Silver	2.2		0.29	0.076	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Sodium	340		59	8.7	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Vanadium	19		0.29	0.069	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1
Zinc	50		1.2	0.52	mg/Kg	☼	11/22/19 17:38	11/25/19 18:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.48	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 13:12	1
Boron	0.065	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Date Collected: 11/13/19 14:25

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 83.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 13:12	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:12	1
Cobalt	0.044		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:12	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 13:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 13:12	1
Manganese	2.3		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:12	1
Nickel	0.10		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:12	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 13:12	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:12	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 13:12	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.030		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 13:09	1
Nickel	<0.025		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 13:09	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:14	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	B	0.019	0.0063	mg/Kg	☼	11/19/19 14:35	11/20/19 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/20/19 14:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 12:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/13/19 17:24	11/21/19 12:01	1
Dibromofluoromethane	93		75 - 126	11/13/19 17:24	11/21/19 12:01	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/13/19 17:24	11/21/19 12:01	1
Toluene-d8 (Surr)	100		75 - 124	11/13/19 17:24	11/21/19 12:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2-Methylnaphthalene	0.032	J	0.082	0.0075	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Phenanthrene	0.063		0.041	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.020	J	0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 11:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		31 - 166				11/21/19 07:55	11/25/19 11:36	1
Phenol-d5	70		30 - 153				11/21/19 07:55	11/25/19 11:36	1
Nitrobenzene-d5	63		37 - 147				11/21/19 07:55	11/25/19 11:36	1
2-Fluorobiphenyl	77		43 - 145				11/21/19 07:55	11/25/19 11:36	1
2,4,6-Tribromophenol	63		31 - 143				11/21/19 07:55	11/25/19 11:36	1
Terphenyl-d14	82		42 - 157				11/21/19 07:55	11/25/19 11:36	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Arsenic	7.6		0.59	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Barium	39		0.59	0.067	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Beryllium	0.71		0.23	0.055	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Boron	17		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Calcium	52000		120	20	mg/Kg	☼	11/22/19 17:38	11/26/19 13:00	10
Chromium	18	B	0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Cobalt	14		0.29	0.077	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Copper	28		0.59	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Iron	20000		12	6.1	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Lead	14		0.29	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Manganese	330		0.59	0.085	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Nickel	37		0.59	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Potassium	2900		29	10	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Selenium	0.78		0.59	0.34	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Silver	2.4		0.29	0.076	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Sodium	170		59	8.7	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Thallium	0.77		0.59	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Vanadium	20		0.29	0.069	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1
Zinc	53		1.2	0.51	mg/Kg	☼	11/22/19 17:38	11/25/19 18:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 13:16	1
Boron	0.11	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 13:16	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:16	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:16	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 13:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 13:16	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:16	1
Nickel	0.043		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:16	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 13:16	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:16	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 13:16	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.015	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 13:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	B	0.020	0.0066	mg/Kg	☼	11/19/19 14:35	11/20/19 08:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			11/20/19 14:17	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/13/19 17:24	11/21/19 12:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 131	11/13/19 17:24	11/21/19 12:27	1
Dibromofluoromethane	94		75 - 126	11/13/19 17:24	11/21/19 12:27	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/13/19 17:24	11/21/19 12:27	1
Toluene-d8 (Surr)	100		75 - 124	11/13/19 17:24	11/21/19 12:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2-Methylnaphthalene	0.045	J	0.079	0.0072	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Phenanthrene	0.10		0.039	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Benzo[a]anthracene	0.025	J	0.039	0.0053	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Bis(2-ethylhexyl) phthalate	0.089	J	0.20	0.072	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 19:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	71		31 - 166	11/21/19 07:55	11/25/19 19:45	1
Phenol-d5	62		30 - 153	11/21/19 07:55	11/25/19 19:45	1
Nitrobenzene-d5	64		37 - 147	11/21/19 07:55	11/25/19 19:45	1
2-Fluorobiphenyl	73		43 - 145	11/21/19 07:55	11/25/19 19:45	1
2,4,6-Tribromophenol	53		31 - 143	11/21/19 07:55	11/25/19 19:45	1
Terphenyl-d14	84		42 - 157	11/21/19 07:55	11/25/19 19:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J	1.2	0.23	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Arsenic	8.1		0.60	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Barium	37		0.60	0.068	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Beryllium	0.70		0.24	0.056	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Boron	16		3.0	0.28	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Cadmium	0.15	B	0.12	0.022	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Calcium	54000		120	20	mg/Kg	☼	11/22/19 17:38	11/26/19 13:08	10
Chromium	15	B	0.60	0.30	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Cobalt	15		0.30	0.078	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Copper	31		0.60	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Iron	20000		12	6.2	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Lead	15		0.30	0.14	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Magnesium	23000		6.0	3.0	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Manganese	330		0.60	0.087	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Nickel	38		0.60	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Potassium	3000		30	11	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Selenium	0.97		0.60	0.35	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Silver	2.2		0.30	0.077	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Sodium	200		60	8.8	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1
Thallium	0.87		0.60	0.30	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Vanadium	20		0.30	0.071	mg/Kg	☼	11/22/19 17:38	11/25/19 19:00	1
Zinc	54		1.2	0.52	mg/Kg	☼	11/22/19 17:38	11/26/19 13:04	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 13:21	1
Boron	0.085	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 13:21	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:21	1
Cobalt	0.017	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:21	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 13:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 13:21	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:21	1
Nickel	0.048		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:21	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 13:21	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:21	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 13:21	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.019	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 13:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.020	0.0066	mg/Kg	☼	11/19/19 14:35	11/20/19 08:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/20/19 14:19	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Date Collected: 11/13/19 14:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0079	J	0.018	0.0078	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1
Xylenes, Total	0.00091	J	0.0036	0.00057	mg/Kg	☼	11/13/19 17:24	11/21/19 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 131	11/13/19 17:24	11/21/19 12:52	1
Dibromofluoromethane	94		75 - 126	11/13/19 17:24	11/21/19 12:52	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/13/19 17:24	11/21/19 12:52	1
Toluene-d8 (Surr)	98		75 - 124	11/13/19 17:24	11/21/19 12:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Date Collected: 11/13/19 14:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2-Methylnaphthalene	0.048	J	0.083	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Phenanthrene	0.10		0.041	0.0057	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Benzo[a]anthracene	0.022	J	0.041	0.0055	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Date Collected: 11/13/19 14:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/21/19 07:55	11/25/19 12:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	77		31 - 166				11/21/19 07:55	11/25/19 12:03	1
Phenol-d5	65		30 - 153				11/21/19 07:55	11/25/19 12:03	1
Nitrobenzene-d5	63		37 - 147				11/21/19 07:55	11/25/19 12:03	1
2-Fluorobiphenyl	72		43 - 145				11/21/19 07:55	11/25/19 12:03	1
2,4,6-Tribromophenol	52		31 - 143				11/21/19 07:55	11/25/19 12:03	1
Terphenyl-d14	79		42 - 157				11/21/19 07:55	11/25/19 12:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.1	0.22	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Arsenic	7.6		0.57	0.20	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Barium	39		0.57	0.065	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Beryllium	0.77		0.23	0.054	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Boron	17		2.9	0.27	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Cadmium	0.13	B	0.11	0.021	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Calcium	53000		110	19	mg/Kg	☼	11/22/19 17:38	11/26/19 13:16	10
Chromium	16	B	0.57	0.28	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Cobalt	14		0.29	0.075	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Copper	29		0.57	0.16	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Iron	20000		11	6.0	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Lead	14		0.29	0.13	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Magnesium	21000		5.7	2.8	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Manganese	330		0.57	0.083	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Nickel	36		0.57	0.17	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Potassium	3300		29	10	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Selenium	0.54	J	0.57	0.34	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Silver	2.4		0.29	0.074	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Sodium	210		57	8.5	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1
Thallium	0.67		0.57	0.29	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Vanadium	21		0.29	0.068	mg/Kg	☼	11/22/19 17:38	11/25/19 19:04	1
Zinc	49		1.1	0.50	mg/Kg	☼	11/22/19 17:38	11/26/19 13:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 13:39	1
Boron	0.089	J	0.50	0.050	mg/L		11/20/19 16:20	11/27/19 13:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Date Collected: 11/13/19 14:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 13:39	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:39	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:39	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 13:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 13:39	1
Manganese	1.8		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:39	1
Nickel	0.039		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:39	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 13:39	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 13:39	1
Zinc	0.021	J	0.50	0.020	mg/L		11/20/19 16:20	11/27/19 13:39	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		11/19/19 16:00	11/20/19 13:21	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 12:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 12:21	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 08:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.020	0.0068	mg/Kg	☼	11/19/19 14:35	11/20/19 08:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			11/20/19 14:23	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

GC/MS VOA

Prep Batch: 515820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	5035	
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	5035	
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	5035	
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	5035	
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	5035	
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	5035	
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	5035	
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	5035	
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	5035	
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	5035	
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	5035	
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	5035	
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	5035	
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	5035	
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	5035	

Analysis Batch: 516315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	8260B	515820
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	8260B	515820
MB 500-516315/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516315/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-516315/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 516503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	8260B	515820
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	8260B	515820
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	8260B	515820
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	8260B	515820
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	8260B	515820
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	8260B	515820
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	8260B	515820
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	8260B	515820
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	8260B	515820
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	8260B	515820
MB 500-516503/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516503/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-516503/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 516539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	8260B	515820
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	8260B	515820
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	8260B	515820
MB 500-516539/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516539/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-516539/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

GC/MS Semi VOA

Prep Batch: 516538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	3541	
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	3541	
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	3541	
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	3541	
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	3541	
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	3541	
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	3541	
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	3541	
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	3541	
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	3541	
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	3541	
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	3541	
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	3541	
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	3541	
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	3541	
MB 500-516538/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-516538/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 516803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-516538/1-A	Method Blank	Total/NA	Solid	8270D	516538
LCS 500-516538/2-A	Lab Control Sample	Total/NA	Solid	8270D	516538

Analysis Batch: 517128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	8270D	516538
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	8270D	516538
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	8270D	516538
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	8270D	516538
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	8270D	516538
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	8270D	516538
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	8270D	516538
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	8270D	516538
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	8270D	516538
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	8270D	516538
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	8270D	516538
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	8270D	516538
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	8270D	516538
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	8270D	516538
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	8270D	516538

Metals

Leach Batch: 515962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	SPLP East	Solid	1312	
500-173437-2	2615V2-AI-B23 (6-12)	SPLP East	Solid	1312	
500-173437-3	2615V2-AI-B23 (12-18)	SPLP East	Solid	1312	
500-173437-4	2615V2-AI-B23 (18-24)	SPLP East	Solid	1312	
500-173437-5	2615V2-AI-B23 (24-30)	SPLP East	Solid	1312	
500-173437-6	2615V2-AI-B12 (0-6)	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Metals (Continued)

Leach Batch: 515962 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-7	2615V2-AI-B12 (6-12)	SPLP East	Solid	1312	
500-173437-8	2615V2-AI-B12 (12-18)	SPLP East	Solid	1312	
500-173437-9	2615V2-AI-B12 (18-24)	SPLP East	Solid	1312	
500-173437-10	2615V2-AI-B12 (24-30)	SPLP East	Solid	1312	
500-173437-11	2615V2-AI-B04 (0-6)	SPLP East	Solid	1312	
500-173437-12	2615V2-AI-B04 (6-12)	SPLP East	Solid	1312	
500-173437-13	2615V2-AI-B04 (12-18)	SPLP East	Solid	1312	
500-173437-14	2615V2-AI-B04 (18-24)	SPLP East	Solid	1312	
500-173437-15	2615V2-AI-B04 (24-30)	SPLP East	Solid	1312	
LB 500-515962/1-B	Method Blank	SPLP East	Solid	1312	
500-173437-15 MS	2615V2-AI-B04 (24-30)	SPLP East	Solid	1312	
500-173437-15 DU	2615V2-AI-B04 (24-30)	SPLP East	Solid	1312	

Leach Batch: 515964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	TCLP	Solid	1311	
500-173437-2	2615V2-AI-B23 (6-12)	TCLP	Solid	1311	
500-173437-3	2615V2-AI-B23 (12-18)	TCLP	Solid	1311	
500-173437-4	2615V2-AI-B23 (18-24)	TCLP	Solid	1311	
500-173437-5	2615V2-AI-B23 (24-30)	TCLP	Solid	1311	
500-173437-6	2615V2-AI-B12 (0-6)	TCLP	Solid	1311	
500-173437-7	2615V2-AI-B12 (6-12)	TCLP	Solid	1311	
500-173437-8	2615V2-AI-B12 (12-18)	TCLP	Solid	1311	
500-173437-9	2615V2-AI-B12 (18-24)	TCLP	Solid	1311	
500-173437-10	2615V2-AI-B12 (24-30)	TCLP	Solid	1311	
500-173437-11	2615V2-AI-B04 (0-6)	TCLP	Solid	1311	
500-173437-12	2615V2-AI-B04 (6-12)	TCLP	Solid	1311	
500-173437-13	2615V2-AI-B04 (12-18)	TCLP	Solid	1311	
500-173437-14	2615V2-AI-B04 (18-24)	TCLP	Solid	1311	
500-173437-15	2615V2-AI-B04 (24-30)	TCLP	Solid	1311	
LB 500-515964/1-B	Method Blank	TCLP	Solid	1311	
LB 500-515964/1-C	Method Blank	TCLP	Solid	1311	
500-173437-14 MS	2615V2-AI-B04 (18-24)	TCLP	Solid	1311	
500-173437-14 DU	2615V2-AI-B04 (18-24)	TCLP	Solid	1311	

Prep Batch: 516180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	7471B	
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	7471B	
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	7471B	
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	7471B	
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	7471B	
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	7471B	
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	7471B	
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	7471B	
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	7471B	
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	7471B	
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	7471B	
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	7471B	
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	7471B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Metals (Continued)

Prep Batch: 516180 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	7471B	
MB 500-516180/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-516180/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-173437-7 MS	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	
500-173437-7 MSD	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	
500-173437-7 DU	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	

Prep Batch: 516253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	SPLP East	Solid	3010A	515962
500-173437-2	2615V2-AI-B23 (6-12)	SPLP East	Solid	3010A	515962
500-173437-3	2615V2-AI-B23 (12-18)	SPLP East	Solid	3010A	515962
500-173437-4	2615V2-AI-B23 (18-24)	SPLP East	Solid	3010A	515962
500-173437-5	2615V2-AI-B23 (24-30)	SPLP East	Solid	3010A	515962
500-173437-6	2615V2-AI-B12 (0-6)	SPLP East	Solid	3010A	515962
500-173437-7	2615V2-AI-B12 (6-12)	SPLP East	Solid	3010A	515962
500-173437-8	2615V2-AI-B12 (12-18)	SPLP East	Solid	3010A	515962
500-173437-9	2615V2-AI-B12 (18-24)	SPLP East	Solid	3010A	515962
500-173437-10	2615V2-AI-B12 (24-30)	SPLP East	Solid	3010A	515962
500-173437-11	2615V2-AI-B04 (0-6)	SPLP East	Solid	3010A	515962
500-173437-12	2615V2-AI-B04 (6-12)	SPLP East	Solid	3010A	515962
500-173437-13	2615V2-AI-B04 (12-18)	SPLP East	Solid	3010A	515962
500-173437-14	2615V2-AI-B04 (18-24)	SPLP East	Solid	3010A	515962
500-173437-15	2615V2-AI-B04 (24-30)	SPLP East	Solid	3010A	515962
LB 500-515962/1-B	Method Blank	SPLP East	Solid	3010A	515962
LCS 500-516253/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173437-15 MS	2615V2-AI-B04 (24-30)	SPLP East	Solid	3010A	515962
500-173437-15 DU	2615V2-AI-B04 (24-30)	SPLP East	Solid	3010A	515962

Prep Batch: 516383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	TCLP	Solid	7470A	515964
500-173437-2	2615V2-AI-B23 (6-12)	TCLP	Solid	7470A	515964
500-173437-3	2615V2-AI-B23 (12-18)	TCLP	Solid	7470A	515964
500-173437-4	2615V2-AI-B23 (18-24)	TCLP	Solid	7470A	515964
500-173437-5	2615V2-AI-B23 (24-30)	TCLP	Solid	7470A	515964
500-173437-6	2615V2-AI-B12 (0-6)	TCLP	Solid	7470A	515964
500-173437-7	2615V2-AI-B12 (6-12)	TCLP	Solid	7470A	515964
500-173437-8	2615V2-AI-B12 (12-18)	TCLP	Solid	7470A	515964
500-173437-9	2615V2-AI-B12 (18-24)	TCLP	Solid	7470A	515964
500-173437-10	2615V2-AI-B12 (24-30)	TCLP	Solid	7470A	515964
500-173437-11	2615V2-AI-B04 (0-6)	TCLP	Solid	7470A	515964
500-173437-12	2615V2-AI-B04 (6-12)	TCLP	Solid	7470A	515964
500-173437-13	2615V2-AI-B04 (12-18)	TCLP	Solid	7470A	515964
500-173437-14	2615V2-AI-B04 (18-24)	TCLP	Solid	7470A	515964
500-173437-15	2615V2-AI-B04 (24-30)	TCLP	Solid	7470A	515964
LB 500-515964/1-B	Method Blank	TCLP	Solid	7470A	515964
MB 500-516383/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-516383/13-A	Lab Control Sample	Total/NA	Solid	7470A	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Metals

Analysis Batch: 516389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	7471B	516180
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	7471B	516180
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	7471B	516180
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	7471B	516180
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	7471B	516180
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	7471B	516180
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	516180
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	7471B	516180
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	7471B	516180
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	7471B	516180
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	7471B	516180
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	7471B	516180
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	7471B	516180
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	7471B	516180
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	7471B	516180
MB 500-516180/12-A	Method Blank	Total/NA	Solid	7471B	516180
LCS 500-516180/13-A	Lab Control Sample	Total/NA	Solid	7471B	516180
500-173437-7 MS	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	516180
500-173437-7 MSD	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	516180
500-173437-7 DU	2615V2-AI-B12 (6-12)	Total/NA	Solid	7471B	516180

Prep Batch: 516484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	TCLP	Solid	3010A	515964
500-173437-2	2615V2-AI-B23 (6-12)	TCLP	Solid	3010A	515964
500-173437-3	2615V2-AI-B23 (12-18)	TCLP	Solid	3010A	515964
500-173437-4	2615V2-AI-B23 (18-24)	TCLP	Solid	3010A	515964
500-173437-5	2615V2-AI-B23 (24-30)	TCLP	Solid	3010A	515964
500-173437-6	2615V2-AI-B12 (0-6)	TCLP	Solid	3010A	515964
500-173437-7	2615V2-AI-B12 (6-12)	TCLP	Solid	3010A	515964
500-173437-8	2615V2-AI-B12 (12-18)	TCLP	Solid	3010A	515964
500-173437-9	2615V2-AI-B12 (18-24)	TCLP	Solid	3010A	515964
500-173437-10	2615V2-AI-B12 (24-30)	TCLP	Solid	3010A	515964
500-173437-11	2615V2-AI-B04 (0-6)	TCLP	Solid	3010A	515964
500-173437-12	2615V2-AI-B04 (6-12)	TCLP	Solid	3010A	515964
500-173437-13	2615V2-AI-B04 (12-18)	TCLP	Solid	3010A	515964
500-173437-14	2615V2-AI-B04 (18-24)	TCLP	Solid	3010A	515964
500-173437-15	2615V2-AI-B04 (24-30)	TCLP	Solid	3010A	515964
LB 500-515964/1-C	Method Blank	TCLP	Solid	3010A	515964
LCS 500-516484/2-A	Lab Control Sample	Total/NA	Solid	3010A	515964
500-173437-14 MS	2615V2-AI-B04 (18-24)	TCLP	Solid	3010A	515964
500-173437-14 DU	2615V2-AI-B04 (18-24)	TCLP	Solid	3010A	515964

Analysis Batch: 516528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	SPLP East	Solid	6010B	516253
500-173437-2	2615V2-AI-B23 (6-12)	SPLP East	Solid	6010B	516253
500-173437-3	2615V2-AI-B23 (12-18)	SPLP East	Solid	6010B	516253
500-173437-4	2615V2-AI-B23 (18-24)	SPLP East	Solid	6010B	516253
500-173437-5	2615V2-AI-B23 (24-30)	SPLP East	Solid	6010B	516253
500-173437-6	2615V2-AI-B12 (0-6)	SPLP East	Solid	6010B	516253

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Metals (Continued)

Analysis Batch: 516528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-7	2615V2-AI-B12 (6-12)	SPLP East	Solid	6010B	516253
500-173437-8	2615V2-AI-B12 (12-18)	SPLP East	Solid	6010B	516253
500-173437-9	2615V2-AI-B12 (18-24)	SPLP East	Solid	6010B	516253
500-173437-10	2615V2-AI-B12 (24-30)	SPLP East	Solid	6010B	516253
500-173437-11	2615V2-AI-B04 (0-6)	SPLP East	Solid	6010B	516253
500-173437-12	2615V2-AI-B04 (6-12)	SPLP East	Solid	6010B	516253
500-173437-13	2615V2-AI-B04 (12-18)	SPLP East	Solid	6010B	516253
500-173437-14	2615V2-AI-B04 (18-24)	SPLP East	Solid	6010B	516253
500-173437-15	2615V2-AI-B04 (24-30)	SPLP East	Solid	6010B	516253
LB 500-515962/1-B	Method Blank	SPLP East	Solid	6010B	516253
LCS 500-516253/2-A	Lab Control Sample	Total/NA	Solid	6010B	516253
500-173437-15 MS	2615V2-AI-B04 (24-30)	SPLP East	Solid	6010B	516253
500-173437-15 DU	2615V2-AI-B04 (24-30)	SPLP East	Solid	6010B	516253

Analysis Batch: 516627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	TCLP	Solid	7470A	516383
500-173437-2	2615V2-AI-B23 (6-12)	TCLP	Solid	7470A	516383
500-173437-3	2615V2-AI-B23 (12-18)	TCLP	Solid	7470A	516383
500-173437-4	2615V2-AI-B23 (18-24)	TCLP	Solid	7470A	516383
500-173437-5	2615V2-AI-B23 (24-30)	TCLP	Solid	7470A	516383
500-173437-6	2615V2-AI-B12 (0-6)	TCLP	Solid	7470A	516383
500-173437-7	2615V2-AI-B12 (6-12)	TCLP	Solid	7470A	516383
500-173437-8	2615V2-AI-B12 (12-18)	TCLP	Solid	7470A	516383
500-173437-9	2615V2-AI-B12 (18-24)	TCLP	Solid	7470A	516383
500-173437-10	2615V2-AI-B12 (24-30)	TCLP	Solid	7470A	516383
500-173437-11	2615V2-AI-B04 (0-6)	TCLP	Solid	7470A	516383
500-173437-12	2615V2-AI-B04 (6-12)	TCLP	Solid	7470A	516383
500-173437-13	2615V2-AI-B04 (12-18)	TCLP	Solid	7470A	516383
500-173437-14	2615V2-AI-B04 (18-24)	TCLP	Solid	7470A	516383
500-173437-15	2615V2-AI-B04 (24-30)	TCLP	Solid	7470A	516383
LB 500-515964/1-B	Method Blank	TCLP	Solid	7470A	516383
MB 500-516383/12-A	Method Blank	Total/NA	Solid	7470A	516383
LCS 500-516383/13-A	Lab Control Sample	Total/NA	Solid	7470A	516383

Prep Batch: 516943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	3050B	
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	3050B	
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	3050B	
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	3050B	
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	3050B	
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	3050B	
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	3050B	
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	3050B	
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	3050B	
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	3050B	
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	3050B	
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	3050B	
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	3050B	
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Metals (Continued)

Prep Batch: 516943 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	3050B	
MB 500-516943/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-516943/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 516998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	TCLP	Solid	6020A	516484
500-173437-2	2615V2-AI-B23 (6-12)	TCLP	Solid	6020A	516484
500-173437-3	2615V2-AI-B23 (12-18)	TCLP	Solid	6020A	516484
500-173437-4	2615V2-AI-B23 (18-24)	TCLP	Solid	6020A	516484
500-173437-5	2615V2-AI-B23 (24-30)	TCLP	Solid	6020A	516484
500-173437-6	2615V2-AI-B12 (0-6)	TCLP	Solid	6020A	516484
500-173437-7	2615V2-AI-B12 (6-12)	TCLP	Solid	6020A	516484
500-173437-8	2615V2-AI-B12 (12-18)	TCLP	Solid	6020A	516484
500-173437-9	2615V2-AI-B12 (18-24)	TCLP	Solid	6020A	516484
500-173437-10	2615V2-AI-B12 (24-30)	TCLP	Solid	6020A	516484
500-173437-11	2615V2-AI-B04 (0-6)	TCLP	Solid	6020A	516484
500-173437-12	2615V2-AI-B04 (6-12)	TCLP	Solid	6020A	516484
500-173437-13	2615V2-AI-B04 (12-18)	TCLP	Solid	6020A	516484
500-173437-14	2615V2-AI-B04 (18-24)	TCLP	Solid	6020A	516484
500-173437-15	2615V2-AI-B04 (24-30)	TCLP	Solid	6020A	516484
LB 500-515964/1-C	Method Blank	TCLP	Solid	6020A	516484
LCS 500-516484/2-A	Lab Control Sample	Total/NA	Solid	6020A	516484
500-173437-14 MS	2615V2-AI-B04 (18-24)	TCLP	Solid	6020A	516484
500-173437-14 DU	2615V2-AI-B04 (18-24)	TCLP	Solid	6020A	516484

Analysis Batch: 517287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	6010B	516943
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	6010B	516943
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	6010B	516943
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	6010B	516943
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	6010B	516943
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	6010B	516943
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	6010B	516943
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	6010B	516943
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	6010B	516943
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	6010B	516943
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	6010B	516943
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	6010B	516943
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	6010B	516943
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	6010B	516943
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	6010B	516943
MB 500-516943/1-A	Method Blank	Total/NA	Solid	6010B	516943
LCS 500-516943/2-A	Lab Control Sample	Total/NA	Solid	6010B	516943

Analysis Batch: 517419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	6010B	516943
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	6010B	516943
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	6010B	516943

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Metals (Continued)

Analysis Batch: 517419 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	6010B	516943
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	6010B	516943
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	6010B	516943
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	6010B	516943
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	6010B	516943
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	6010B	516943
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	6010B	516943
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	6010B	516943
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	6010B	516943
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	6010B	516943
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	6010B	516943

Analysis Batch: 517660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	TCLP	Solid	6010B	516484
500-173437-2	2615V2-AI-B23 (6-12)	TCLP	Solid	6010B	516484
500-173437-3	2615V2-AI-B23 (12-18)	TCLP	Solid	6010B	516484
500-173437-4	2615V2-AI-B23 (18-24)	TCLP	Solid	6010B	516484
500-173437-5	2615V2-AI-B23 (24-30)	TCLP	Solid	6010B	516484
500-173437-6	2615V2-AI-B12 (0-6)	TCLP	Solid	6010B	516484
500-173437-7	2615V2-AI-B12 (6-12)	TCLP	Solid	6010B	516484
500-173437-8	2615V2-AI-B12 (12-18)	TCLP	Solid	6010B	516484
500-173437-9	2615V2-AI-B12 (18-24)	TCLP	Solid	6010B	516484
500-173437-10	2615V2-AI-B12 (24-30)	TCLP	Solid	6010B	516484
500-173437-11	2615V2-AI-B04 (0-6)	TCLP	Solid	6010B	516484
500-173437-12	2615V2-AI-B04 (6-12)	TCLP	Solid	6010B	516484
500-173437-13	2615V2-AI-B04 (12-18)	TCLP	Solid	6010B	516484
500-173437-14	2615V2-AI-B04 (18-24)	TCLP	Solid	6010B	516484
500-173437-15	2615V2-AI-B04 (24-30)	TCLP	Solid	6010B	516484
LB 500-515964/1-C	Method Blank	TCLP	Solid	6010B	516484
LCS 500-516484/2-A	Lab Control Sample	Total/NA	Solid	6010B	516484
500-173437-14 MS	2615V2-AI-B04 (18-24)	TCLP	Solid	6010B	516484
500-173437-14 DU	2615V2-AI-B04 (18-24)	TCLP	Solid	6010B	516484

General Chemistry

Analysis Batch: 515617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	Moisture	
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	Moisture	
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	Moisture	
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	Moisture	
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	Moisture	
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	Moisture	
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	Moisture	
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	Moisture	
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	Moisture	
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	Moisture	
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	Moisture	
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	Moisture	
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	Moisture	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

General Chemistry (Continued)

Analysis Batch: 515617 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	Moisture	
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	Moisture	
500-173437-1 DU	2615V2-AI-B23 (0-6)	Total/NA	Solid	Moisture	

Analysis Batch: 516400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173437-1	2615V2-AI-B23 (0-6)	Total/NA	Solid	9045D	
500-173437-2	2615V2-AI-B23 (6-12)	Total/NA	Solid	9045D	
500-173437-3	2615V2-AI-B23 (12-18)	Total/NA	Solid	9045D	
500-173437-4	2615V2-AI-B23 (18-24)	Total/NA	Solid	9045D	
500-173437-5	2615V2-AI-B23 (24-30)	Total/NA	Solid	9045D	
500-173437-6	2615V2-AI-B12 (0-6)	Total/NA	Solid	9045D	
500-173437-7	2615V2-AI-B12 (6-12)	Total/NA	Solid	9045D	
500-173437-8	2615V2-AI-B12 (12-18)	Total/NA	Solid	9045D	
500-173437-9	2615V2-AI-B12 (18-24)	Total/NA	Solid	9045D	
500-173437-10	2615V2-AI-B12 (24-30)	Total/NA	Solid	9045D	
500-173437-11	2615V2-AI-B04 (0-6)	Total/NA	Solid	9045D	
500-173437-12	2615V2-AI-B04 (6-12)	Total/NA	Solid	9045D	
500-173437-13	2615V2-AI-B04 (12-18)	Total/NA	Solid	9045D	
500-173437-14	2615V2-AI-B04 (18-24)	Total/NA	Solid	9045D	
500-173437-15	2615V2-AI-B04 (24-30)	Total/NA	Solid	9045D	
LCS 500-516400/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-516400/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173437-15 DU	2615V2-AI-B04 (24-30)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (75-131)	DBFM (75-126)	DCA (70-134)	TOL (75-124)
500-173437-1	2615V2-AI-B23 (0-6)	97	93	95	94
500-173437-2	2615V2-AI-B23 (6-12)	100	92	95	94
500-173437-3	2615V2-AI-B23 (12-18)	93	97	94	97
500-173437-4	2615V2-AI-B23 (18-24)	93	95	93	98
500-173437-5	2615V2-AI-B23 (24-30)	93	96	95	99
500-173437-6	2615V2-AI-B12 (0-6)	107	95	97	102
500-173437-7	2615V2-AI-B12 (6-12)	99	93	93	102
500-173437-8	2615V2-AI-B12 (12-18)	92	97	94	98
500-173437-9	2615V2-AI-B12 (18-24)	92	94	94	97
500-173437-10	2615V2-AI-B12 (24-30)	92	94	92	99
500-173437-11	2615V2-AI-B04 (0-6)	94	96	95	99
500-173437-12	2615V2-AI-B04 (6-12)	96	95	94	100
500-173437-13	2615V2-AI-B04 (12-18)	93	93	91	100
500-173437-14	2615V2-AI-B04 (18-24)	93	94	91	100
500-173437-15	2615V2-AI-B04 (24-30)	94	94	94	98
LCS 500-516315/4	Lab Control Sample	91	86	89	94
LCS 500-516503/4	Lab Control Sample	86	94	88	93
LCS 500-516539/4	Lab Control Sample	85	94	89	95
LCS 500-516315/5	Lab Control Sample Dup	94	87	88	93
LCS 500-516503/5	Lab Control Sample Dup	85	96	89	92
LCS 500-516539/5	Lab Control Sample Dup	87	94	91	94
MB 500-516315/7	Method Blank	97	86	88	92
MB 500-516503/7	Method Blank	91	94	91	96
MB 500-516539/7	Method Blank	92	91	90	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173437-1	2615V2-AI-B23 (0-6)	91	77	71	83	82	91
500-173437-2	2615V2-AI-B23 (6-12)	76	69	61	72	68	83
500-173437-3	2615V2-AI-B23 (12-18)	83	77	75	85	62	87
500-173437-4	2615V2-AI-B23 (18-24)	94	86	80	91	73	93
500-173437-5	2615V2-AI-B23 (24-30)	79	69	64	74	47	79
500-173437-6	2615V2-AI-B12 (0-6)	81	69	68	79	69	81
500-173437-7	2615V2-AI-B12 (6-12)	67	56	54	65	48	70
500-173437-8	2615V2-AI-B12 (12-18)	79	68	64	75	40	77
500-173437-9	2615V2-AI-B12 (18-24)	76	66	71	85	52	83
500-173437-10	2615V2-AI-B12 (24-30)	67	56	54	65	38	68
500-173437-11	2615V2-AI-B04 (0-6)	80	70	66	79	62	83
500-173437-12	2615V2-AI-B04 (6-12)	64	59	52	64	48	80
500-173437-13	2615V2-AI-B04 (12-18)	79	70	63	77	63	82

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173437-14	2615V2-AI-B04 (18-24)	71	62	64	73	53	84
500-173437-15	2615V2-AI-B04 (24-30)	77	65	63	72	52	79
LCS 500-516538/2-A	Lab Control Sample	118	107	91	89	83	92
MB 500-516538/1-A	Method Blank	121	107	88	88	69	93

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516315/7
Matrix: Solid
Analysis Batch: 516315

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<0.020		0.020	0.0087	mg/Kg			11/20/19 12:27	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 12:27	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/20/19 12:27	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 12:27	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/20/19 12:27	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/20/19 12:27	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/20/19 12:27	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 12:27	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/20/19 12:27	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 12:27	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 12:27	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 12:27	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/20/19 12:27	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 12:27	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/20/19 12:27	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 12:27	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 12:27	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 12:27	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/20/19 12:27	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 12:27	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/20/19 12:27	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 12:27	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 12:27	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 12:27	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/20/19 12:27	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 12:27	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/20/19 12:27	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 12:27	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 12:27	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 12:27	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 12:27	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/20/19 12:27	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/20/19 12:27	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 12:27	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/20/19 12:27	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 12:27	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/20/19 12:27	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		75 - 131		11/20/19 12:27	1
Dibromofluoromethane	86		75 - 126		11/20/19 12:27	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 134		11/20/19 12:27	1
Toluene-d8 (Surr)	92		75 - 124		11/20/19 12:27	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516315/4

Matrix: Solid

Analysis Batch: 516315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0463		mg/Kg		93	40 - 150
Benzene	0.0500	0.0434		mg/Kg		87	70 - 125
Bromodichloromethane	0.0500	0.0428		mg/Kg		86	67 - 129
Bromoform	0.0500	0.0385		mg/Kg		77	68 - 136
Bromomethane	0.0500	0.0523		mg/Kg		105	70 - 130
2-Butanone (MEK)	0.0500	0.0433		mg/Kg		87	47 - 138
Carbon disulfide	0.0500	0.0407		mg/Kg		81	70 - 129
Carbon tetrachloride	0.0500	0.0432		mg/Kg		86	75 - 125
Chlorobenzene	0.0500	0.0446		mg/Kg		89	50 - 150
Chloroethane	0.0500	0.0464		mg/Kg		93	75 - 125
Chloroform	0.0500	0.0415		mg/Kg		83	57 - 135
Chloromethane	0.0500	0.0476		mg/Kg		95	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0411		mg/Kg		82	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0428		mg/Kg		86	70 - 125
Dibromochloromethane	0.0500	0.0418		mg/Kg		84	69 - 125
1,1-Dichloroethane	0.0500	0.0416		mg/Kg		83	70 - 125
1,2-Dichloroethane	0.0500	0.0431		mg/Kg		86	70 - 130
1,1-Dichloroethene	0.0500	0.0429		mg/Kg		86	70 - 120
1,2-Dichloropropane	0.0500	0.0429		mg/Kg		86	70 - 125
Ethylbenzene	0.0500	0.0442		mg/Kg		88	61 - 136
2-Hexanone	0.0500	0.0428		mg/Kg		86	48 - 146
Methylene Chloride	0.0500	0.0409		mg/Kg		82	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0397		mg/Kg		79	50 - 148
Methyl tert-butyl ether	0.0500	0.0422		mg/Kg		84	50 - 140
Styrene	0.0500	0.0437		mg/Kg		87	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0398		mg/Kg		80	70 - 122
Tetrachloroethene	0.0500	0.0454		mg/Kg		91	70 - 124
Toluene	0.0500	0.0453		mg/Kg		91	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0416		mg/Kg		83	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0436		mg/Kg		87	70 - 125
1,1,1-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 128
1,1,2-Trichloroethane	0.0500	0.0440		mg/Kg		88	70 - 125
Trichloroethene	0.0500	0.0433		mg/Kg		87	70 - 125
Vinyl acetate	0.0500	0.0380		mg/Kg		76	40 - 153
Vinyl chloride	0.0500	0.0486		mg/Kg		97	70 - 125
Xylenes, Total	0.100	0.0877		mg/Kg		88	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	86		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516315/5
Matrix: Solid
Analysis Batch: 516315

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0459		mg/Kg		92	40 - 150	1	30
Benzene	0.0500	0.0420		mg/Kg		84	70 - 125	3	30
Bromodichloromethane	0.0500	0.0410		mg/Kg		82	67 - 129	4	30
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136	5	30
Bromomethane	0.0500	0.0497		mg/Kg		99	70 - 130	5	30
2-Butanone (MEK)	0.0500	0.0390		mg/Kg		78	47 - 138	10	30
Carbon disulfide	0.0500	0.0395		mg/Kg		79	70 - 129	3	30
Carbon tetrachloride	0.0500	0.0414		mg/Kg		83	75 - 125	4	30
Chlorobenzene	0.0500	0.0419		mg/Kg		84	50 - 150	6	30
Chloroethane	0.0500	0.0450		mg/Kg		90	75 - 125	3	30
Chloroform	0.0500	0.0401		mg/Kg		80	57 - 135	3	30
Chloromethane	0.0500	0.0463		mg/Kg		93	70 - 125	3	30
cis-1,2-Dichloroethene	0.0500	0.0402		mg/Kg		80	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0411		mg/Kg		82	70 - 125	4	30
Dibromochloromethane	0.0500	0.0389		mg/Kg		78	69 - 125	7	30
1,1-Dichloroethane	0.0500	0.0400		mg/Kg		80	70 - 125	4	30
1,2-Dichloroethane	0.0500	0.0418		mg/Kg		84	70 - 130	3	30
1,1-Dichloroethene	0.0500	0.0421		mg/Kg		84	70 - 120	2	30
1,2-Dichloropropane	0.0500	0.0411		mg/Kg		82	70 - 125	4	30
Ethylbenzene	0.0500	0.0416		mg/Kg		83	61 - 136	6	30
2-Hexanone	0.0500	0.0389		mg/Kg		78	48 - 146	10	30
Methylene Chloride	0.0500	0.0401		mg/Kg		80	70 - 126	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0362		mg/Kg		72	50 - 148	9	30
Methyl tert-butyl ether	0.0500	0.0403		mg/Kg		81	50 - 140	5	30
Styrene	0.0500	0.0418		mg/Kg		84	70 - 125	5	30
1,1,2,2-Tetrachloroethane	0.0500	0.0387		mg/Kg		77	70 - 122	3	30
Tetrachloroethene	0.0500	0.0429		mg/Kg		86	70 - 124	6	30
Toluene	0.0500	0.0425		mg/Kg		85	70 - 125	6	30
trans-1,2-Dichloroethene	0.0500	0.0403		mg/Kg		81	70 - 125	3	30
trans-1,3-Dichloropropene	0.0500	0.0410		mg/Kg		82	70 - 125	6	30
1,1,1-Trichloroethane	0.0500	0.0420		mg/Kg		84	70 - 128	3	30
1,1,2-Trichloroethane	0.0500	0.0413		mg/Kg		83	70 - 125	6	30
Trichloroethene	0.0500	0.0423		mg/Kg		85	70 - 125	2	30
Vinyl acetate	0.0500	0.0321		mg/Kg		64	40 - 153	17	30
Vinyl chloride	0.0500	0.0469		mg/Kg		94	70 - 125	3	30
Xylenes, Total	0.100	0.0835		mg/Kg		83	53 - 147	5	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	87		75 - 126
1,2-Dichloroethane-d4 (Surr)	88		70 - 134
Toluene-d8 (Surr)	93		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516503/7
Matrix: Solid
Analysis Batch: 516503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<0.020		0.020	0.0087	mg/Kg			11/20/19 23:14	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 23:14	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/20/19 23:14	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 23:14	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/20/19 23:14	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/20/19 23:14	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/20/19 23:14	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/20/19 23:14	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/20/19 23:14	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 23:14	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 23:14	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 23:14	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/20/19 23:14	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 23:14	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/20/19 23:14	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 23:14	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 23:14	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/20/19 23:14	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/20/19 23:14	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 23:14	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/20/19 23:14	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/20/19 23:14	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/20/19 23:14	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/20/19 23:14	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/20/19 23:14	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/20/19 23:14	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/20/19 23:14	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 23:14	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/20/19 23:14	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 23:14	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/20/19 23:14	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/20/19 23:14	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/20/19 23:14	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/20/19 23:14	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/20/19 23:14	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/20/19 23:14	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/20/19 23:14	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	91		75 - 131		11/20/19 23:14	1
Dibromofluoromethane	94		75 - 126		11/20/19 23:14	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 134		11/20/19 23:14	1
Toluene-d8 (Surr)	96		75 - 124		11/20/19 23:14	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516503/4
Matrix: Solid
Analysis Batch: 516503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0480		mg/Kg		96	40 - 150
Benzene	0.0500	0.0480		mg/Kg		96	70 - 125
Bromodichloromethane	0.0500	0.0448		mg/Kg		90	67 - 129
Bromoform	0.0500	0.0438		mg/Kg		88	68 - 136
Bromomethane	0.0500	0.0413		mg/Kg		83	70 - 130
2-Butanone (MEK)	0.0500	0.0449		mg/Kg		90	47 - 138
Carbon disulfide	0.0500	0.0522		mg/Kg		104	70 - 129
Carbon tetrachloride	0.0500	0.0448		mg/Kg		90	75 - 125
Chlorobenzene	0.0500	0.0460		mg/Kg		92	50 - 150
Chloroethane	0.0500	0.0403		mg/Kg		81	75 - 125
Chloroform	0.0500	0.0463		mg/Kg		93	57 - 135
Chloromethane	0.0500	0.0473		mg/Kg		95	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0478		mg/Kg		96	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0421		mg/Kg		84	70 - 125
Dibromochloromethane	0.0500	0.0429		mg/Kg		86	69 - 125
1,1-Dichloroethane	0.0500	0.0500		mg/Kg		100	70 - 125
1,2-Dichloroethane	0.0500	0.0460		mg/Kg		92	70 - 130
1,1-Dichloroethene	0.0500	0.0492		mg/Kg		98	70 - 120
1,2-Dichloropropane	0.0500	0.0499		mg/Kg		100	70 - 125
Ethylbenzene	0.0500	0.0457		mg/Kg		91	61 - 136
2-Hexanone	0.0500	0.0407		mg/Kg		81	48 - 146
Methylene Chloride	0.0500	0.0469		mg/Kg		94	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0417		mg/Kg		83	50 - 148
Methyl tert-butyl ether	0.0500	0.0468		mg/Kg		94	50 - 140
Styrene	0.0500	0.0441		mg/Kg		88	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0454		mg/Kg		91	70 - 122
Tetrachloroethene	0.0500	0.0471		mg/Kg		94	70 - 124
Toluene	0.0500	0.0448		mg/Kg		90	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0490		mg/Kg		98	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0420		mg/Kg		84	70 - 125
1,1,1-Trichloroethane	0.0500	0.0456		mg/Kg		91	70 - 128
1,1,2-Trichloroethane	0.0500	0.0458		mg/Kg		92	70 - 125
Trichloroethene	0.0500	0.0474		mg/Kg		95	70 - 125
Vinyl acetate	0.0500	0.0330		mg/Kg		66	40 - 153
Vinyl chloride	0.0500	0.0499		mg/Kg		100	70 - 125
Xylenes, Total	0.100	0.0853		mg/Kg		85	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	86		75 - 131
Dibromofluoromethane	94		75 - 126
1,2-Dichloroethane-d4 (Surr)	88		70 - 134
Toluene-d8 (Surr)	93		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516503/5
Matrix: Solid
Analysis Batch: 516503

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0487		mg/Kg		97	40 - 150	1	30
Benzene	0.0500	0.0447		mg/Kg		89	70 - 125	7	30
Bromodichloromethane	0.0500	0.0416		mg/Kg		83	67 - 129	7	30
Bromoform	0.0500	0.0411		mg/Kg		82	68 - 136	6	30
Bromomethane	0.0500	0.0396		mg/Kg		79	70 - 130	4	30
2-Butanone (MEK)	0.0500	0.0422		mg/Kg		84	47 - 138	6	30
Carbon disulfide	0.0500	0.0512		mg/Kg		102	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0434		mg/Kg		87	75 - 125	3	30
Chlorobenzene	0.0500	0.0430		mg/Kg		86	50 - 150	7	30
Chloroethane	0.0500	0.0395		mg/Kg		79	75 - 125	2	30
Chloroform	0.0500	0.0439		mg/Kg		88	57 - 135	5	30
Chloromethane	0.0500	0.0457		mg/Kg		91	70 - 125	4	30
cis-1,2-Dichloroethene	0.0500	0.0463		mg/Kg		93	70 - 125	3	30
cis-1,3-Dichloropropene	0.0500	0.0393		mg/Kg		79	70 - 125	7	30
Dibromochloromethane	0.0500	0.0405		mg/Kg		81	69 - 125	6	30
1,1-Dichloroethane	0.0500	0.0472		mg/Kg		94	70 - 125	6	30
1,2-Dichloroethane	0.0500	0.0434		mg/Kg		87	70 - 130	6	30
1,1-Dichloroethene	0.0500	0.0481		mg/Kg		96	70 - 120	2	30
1,2-Dichloropropane	0.0500	0.0449		mg/Kg		90	70 - 125	11	30
Ethylbenzene	0.0500	0.0431		mg/Kg		86	61 - 136	6	30
2-Hexanone	0.0500	0.0403		mg/Kg		81	48 - 146	1	30
Methylene Chloride	0.0500	0.0453		mg/Kg		91	70 - 126	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0412		mg/Kg		82	50 - 148	1	30
Methyl tert-butyl ether	0.0500	0.0446		mg/Kg		89	50 - 140	5	30
Styrene	0.0500	0.0417		mg/Kg		83	70 - 125	6	30
1,1,2,2-Tetrachloroethane	0.0500	0.0417		mg/Kg		83	70 - 122	9	30
Tetrachloroethene	0.0500	0.0448		mg/Kg		90	70 - 124	5	30
Toluene	0.0500	0.0424		mg/Kg		85	70 - 125	6	30
trans-1,2-Dichloroethene	0.0500	0.0470		mg/Kg		94	70 - 125	4	30
trans-1,3-Dichloropropene	0.0500	0.0391		mg/Kg		78	70 - 125	7	30
1,1,1-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 128	6	30
1,1,2-Trichloroethane	0.0500	0.0421		mg/Kg		84	70 - 125	9	30
Trichloroethene	0.0500	0.0448		mg/Kg		90	70 - 125	6	30
Vinyl acetate	0.0500	0.0305		mg/Kg		61	40 - 153	8	30
Vinyl chloride	0.0500	0.0474		mg/Kg		95	70 - 125	5	30
Xylenes, Total	0.100	0.0816		mg/Kg		82	53 - 147	4	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	85		75 - 131
Dibromofluoromethane	96		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	92		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516539/7
Matrix: Solid
Analysis Batch: 516539

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			11/21/19 11:10	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/21/19 11:10	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/21/19 11:10	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/21/19 11:10	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/21/19 11:10	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/21/19 11:10	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/21/19 11:10	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/21/19 11:10	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/21/19 11:10	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/21/19 11:10	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:10	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/21/19 11:10	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/21/19 11:10	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/21/19 11:10	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/21/19 11:10	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:10	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/21/19 11:10	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:10	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/21/19 11:10	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/21/19 11:10	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/21/19 11:10	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/21/19 11:10	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/21/19 11:10	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/21/19 11:10	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/21/19 11:10	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/21/19 11:10	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/21/19 11:10	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/21/19 11:10	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/21/19 11:10	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/21/19 11:10	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/21/19 11:10	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/21/19 11:10	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/21/19 11:10	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/21/19 11:10	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/21/19 11:10	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/21/19 11:10	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/21/19 11:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 131		11/21/19 11:10	1
Dibromofluoromethane	91		75 - 126		11/21/19 11:10	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		11/21/19 11:10	1
Toluene-d8 (Surr)	96		75 - 124		11/21/19 11:10	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516539/4
Matrix: Solid
Analysis Batch: 516539

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0462		mg/Kg		92	40 - 150
Benzene	0.0500	0.0479		mg/Kg		96	70 - 125
Bromodichloromethane	0.0500	0.0438		mg/Kg		88	67 - 129
Bromoform	0.0500	0.0436		mg/Kg		87	68 - 136
Bromomethane	0.0500	0.0528		mg/Kg		106	70 - 130
2-Butanone (MEK)	0.0500	0.0415		mg/Kg		83	47 - 138
Carbon disulfide	0.0500	0.0546		mg/Kg		109	70 - 129
Carbon tetrachloride	0.0500	0.0473		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0464		mg/Kg		93	50 - 150
Chloroethane	0.0500	0.0661	*	mg/Kg		132	75 - 125
Chloroform	0.0500	0.0465		mg/Kg		93	57 - 135
Chloromethane	0.0500	0.0491		mg/Kg		98	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0478		mg/Kg		96	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0430		mg/Kg		86	70 - 125
Dibromochloromethane	0.0500	0.0437		mg/Kg		87	69 - 125
1,1-Dichloroethane	0.0500	0.0497		mg/Kg		99	70 - 125
1,2-Dichloroethane	0.0500	0.0449		mg/Kg		90	70 - 130
1,1-Dichloroethene	0.0500	0.0502		mg/Kg		100	70 - 120
1,2-Dichloropropane	0.0500	0.0476		mg/Kg		95	70 - 125
Ethylbenzene	0.0500	0.0470		mg/Kg		94	61 - 136
2-Hexanone	0.0500	0.0429		mg/Kg		86	48 - 146
Methylene Chloride	0.0500	0.0460		mg/Kg		92	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0430		mg/Kg		86	50 - 148
Methyl tert-butyl ether	0.0500	0.0439		mg/Kg		88	50 - 140
Styrene	0.0500	0.0446		mg/Kg		89	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0443		mg/Kg		89	70 - 122
Tetrachloroethene	0.0500	0.0513		mg/Kg		103	70 - 124
Toluene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0501		mg/Kg		100	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0412		mg/Kg		82	70 - 125
1,1,1-Trichloroethane	0.0500	0.0464		mg/Kg		93	70 - 128
1,1,2-Trichloroethane	0.0500	0.0458		mg/Kg		92	70 - 125
Trichloroethene	0.0500	0.0488		mg/Kg		98	70 - 125
Vinyl acetate	0.0500	0.0320		mg/Kg		64	40 - 153
Vinyl chloride	0.0500	0.0516		mg/Kg		103	70 - 125
Xylenes, Total	0.100	0.0889		mg/Kg		89	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	85		75 - 131
Dibromofluoromethane	94		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516539/5
Matrix: Solid
Analysis Batch: 516539

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0479		mg/Kg		96	40 - 150	4	30
Benzene	0.0500	0.0477		mg/Kg		95	70 - 125	0	30
Bromodichloromethane	0.0500	0.0460		mg/Kg		92	67 - 129	5	30
Bromoform	0.0500	0.0447		mg/Kg		89	68 - 136	3	30
Bromomethane	0.0500	0.0530		mg/Kg		106	70 - 130	0	30
2-Butanone (MEK)	0.0500	0.0444		mg/Kg		89	47 - 138	7	30
Carbon disulfide	0.0500	0.0537		mg/Kg		107	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0467		mg/Kg		93	75 - 125	1	30
Chlorobenzene	0.0500	0.0463		mg/Kg		93	50 - 150	0	30
Chloroethane	0.0500	0.0665	*	mg/Kg		133	75 - 125	1	30
Chloroform	0.0500	0.0463		mg/Kg		93	57 - 135	0	30
Chloromethane	0.0500	0.0493		mg/Kg		99	70 - 125	0	30
cis-1,2-Dichloroethene	0.0500	0.0481		mg/Kg		96	70 - 125	1	30
cis-1,3-Dichloropropene	0.0500	0.0437		mg/Kg		87	70 - 125	1	30
Dibromochloromethane	0.0500	0.0453		mg/Kg		91	69 - 125	4	30
1,1-Dichloroethane	0.0500	0.0500		mg/Kg		100	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0463		mg/Kg		93	70 - 130	3	30
1,1-Dichloroethene	0.0500	0.0504		mg/Kg		101	70 - 120	0	30
1,2-Dichloropropane	0.0500	0.0499		mg/Kg		100	70 - 125	5	30
Ethylbenzene	0.0500	0.0463		mg/Kg		93	61 - 136	1	30
2-Hexanone	0.0500	0.0442		mg/Kg		88	48 - 146	3	30
Methylene Chloride	0.0500	0.0461		mg/Kg		92	70 - 126	0	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0444		mg/Kg		89	50 - 148	3	30
Methyl tert-butyl ether	0.0500	0.0469		mg/Kg		94	50 - 140	7	30
Styrene	0.0500	0.0441		mg/Kg		88	70 - 125	1	30
1,1,2,2-Tetrachloroethane	0.0500	0.0487		mg/Kg		97	70 - 122	9	30
Tetrachloroethene	0.0500	0.0500		mg/Kg		100	70 - 124	3	30
Toluene	0.0500	0.0462		mg/Kg		92	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0495		mg/Kg		99	70 - 125	1	30
trans-1,3-Dichloropropene	0.0500	0.0429		mg/Kg		86	70 - 125	4	30
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 128	2	30
1,1,2-Trichloroethane	0.0500	0.0479		mg/Kg		96	70 - 125	4	30
Trichloroethene	0.0500	0.0484		mg/Kg		97	70 - 125	1	30
Vinyl acetate	0.0500	0.0326		mg/Kg		65	40 - 153	2	30
Vinyl chloride	0.0500	0.0518		mg/Kg		104	70 - 125	0	30
Xylenes, Total	0.100	0.0864		mg/Kg		86	53 - 147	3	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	87		75 - 131
Dibromofluoromethane	94		75 - 126
1,2-Dichloroethane-d4 (Surr)	91		70 - 134
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516538/1-A
Matrix: Solid
Analysis Batch: 516803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516538

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/21/19 07:55	11/22/19 14:38	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516538/1-A
Matrix: Solid
Analysis Batch: 516803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/21/19 07:55	11/22/19 14:38	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/21/19 07:55	11/22/19 14:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	121		31 - 166	11/21/19 07:55	11/22/19 14:38	1
Phenol-d5	107		30 - 153	11/21/19 07:55	11/22/19 14:38	1
Nitrobenzene-d5	88		37 - 147	11/21/19 07:55	11/22/19 14:38	1
2-Fluorobiphenyl	88		43 - 145	11/21/19 07:55	11/22/19 14:38	1
2,4,6-Tribromophenol	69		31 - 143	11/21/19 07:55	11/22/19 14:38	1
Terphenyl-d14	93		42 - 157	11/21/19 07:55	11/22/19 14:38	1

Lab Sample ID: LCS 500-516538/2-A
Matrix: Solid
Analysis Batch: 516803

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.56		mg/Kg		117	56 - 122
Bis(2-chloroethyl)ether	1.33	1.27		mg/Kg		95	55 - 111
1,3-Dichlorobenzene	1.33	1.17		mg/Kg		88	65 - 124
1,4-Dichlorobenzene	1.33	1.20		mg/Kg		90	61 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		89	62 - 110
2-Methylphenol	1.33	1.47		mg/Kg		110	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.71	*	mg/Kg		129	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.39		mg/Kg		104	56 - 118
Hexachloroethane	1.33	1.27		mg/Kg		95	60 - 114
2-Chlorophenol	1.33	1.32		mg/Kg		99	64 - 110
Nitrobenzene	1.33	1.39		mg/Kg		104	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.36		mg/Kg		102	60 - 112
1,2,4-Trichlorobenzene	1.33	1.21		mg/Kg		91	66 - 117
Isophorone	1.33	1.34		mg/Kg		101	55 - 110
2,4-Dimethylphenol	1.33	1.21		mg/Kg		91	60 - 110
Hexachlorobutadiene	1.33	1.20		mg/Kg		90	56 - 120
Naphthalene	1.33	1.26		mg/Kg		95	63 - 110
2,4-Dichlorophenol	1.33	1.24		mg/Kg		93	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516538/2-A

Matrix: Solid

Analysis Batch: 516803

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.23		mg/Kg		93	30 - 150
2,4,6-Trichlorophenol	1.33	1.12		mg/Kg		84	57 - 120
2,4,5-Trichlorophenol	1.33	1.16		mg/Kg		87	50 - 120
Hexachlorocyclopentadiene	1.33	0.770		mg/Kg		58	10 - 133
2-Methylnaphthalene	1.33	1.26		mg/Kg		94	69 - 112
2-Nitroaniline	1.33	1.38		mg/Kg		103	57 - 124
2-Chloronaphthalene	1.33	1.24		mg/Kg		93	69 - 114
4-Chloro-3-methylphenol	1.33	1.28		mg/Kg		96	65 - 122
2,6-Dinitrotoluene	1.33	1.29		mg/Kg		97	70 - 123
2-Nitrophenol	1.33	1.26		mg/Kg		94	60 - 120
3-Nitroaniline	1.33	1.14		mg/Kg		85	40 - 122
Dimethyl phthalate	1.33	1.27		mg/Kg		95	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		11	10 - 100
Acenaphthylene	1.33	1.29		mg/Kg		96	68 - 120
2,4-Dinitrotoluene	1.33	1.30		mg/Kg		98	69 - 124
Acenaphthene	1.33	1.25		mg/Kg		94	65 - 124
Dibenzofuran	1.33	1.26		mg/Kg		94	66 - 115
4-Nitrophenol	2.67	2.45		mg/Kg		92	30 - 122
Fluorene	1.33	1.26		mg/Kg		94	62 - 120
4-Nitroaniline	1.33	1.19		mg/Kg		89	60 - 160
4-Bromophenyl phenyl ether	1.33	1.24		mg/Kg		93	68 - 118
Hexachlorobenzene	1.33	1.24		mg/Kg		93	63 - 124
Diethyl phthalate	1.33	1.28		mg/Kg		96	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.19		mg/Kg		89	62 - 119
Pentachlorophenol	2.67	1.30		mg/Kg		49	13 - 112
N-Nitrosodiphenylamine	1.33	1.33		mg/Kg		100	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.653	J	mg/Kg		24	10 - 110
Phenanthrene	1.33	1.29		mg/Kg		97	62 - 120
Anthracene	1.33	1.31		mg/Kg		98	70 - 114
Carbazole	1.33	1.36		mg/Kg		102	65 - 142
Di-n-butyl phthalate	1.33	1.35		mg/Kg		101	65 - 120
Fluoranthene	1.33	1.28		mg/Kg		96	62 - 120
Pyrene	1.33	1.36		mg/Kg		102	61 - 128
Butyl benzyl phthalate	1.33	1.39		mg/Kg		104	71 - 129
Benzo[a]anthracene	1.33	1.25		mg/Kg		94	67 - 122
Chrysene	1.33	1.23		mg/Kg		93	63 - 120
3,3'-Dichlorobenzidine	1.33	1.08		mg/Kg		81	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.39		mg/Kg		104	72 - 131
Di-n-octyl phthalate	1.33	1.33		mg/Kg		100	68 - 134
Benzo[b]fluoranthene	1.33	1.32		mg/Kg		99	69 - 129
Benzo[k]fluoranthene	1.33	1.30		mg/Kg		97	68 - 127
Benzo[a]pyrene	1.33	1.34		mg/Kg		100	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.29		mg/Kg		97	68 - 130
Dibenz(a,h)anthracene	1.33	1.27		mg/Kg		95	64 - 131
Benzo[g,h,i]perylene	1.33	1.36		mg/Kg		102	72 - 131
3 & 4 Methylphenol	1.33	1.38		mg/Kg		104	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516538/2-A
Matrix: Solid
Analysis Batch: 516803

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516538

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	118		31 - 166
Phenol-d5	107		30 - 153
Nitrobenzene-d5	91		37 - 147
2-Fluorobiphenyl	89		43 - 145
2,4,6-Tribromophenol	83		31 - 143
Terphenyl-d14	92		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-516253/2-A
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516253

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Lead	0.100	0.113		mg/L		113	80 - 120
Manganese	0.500	0.563		mg/L		113	80 - 120
Nickel	0.500	0.551		mg/L		110	80 - 120

Lab Sample ID: LCS 500-516484/2-A
Matrix: Solid
Analysis Batch: 517660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516484

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Barium	0.500	0.501		mg/L		100	80 - 120
Beryllium	0.0500	0.0506		mg/L		101	80 - 120
Boron	1.00	0.916		mg/L		92	80 - 120
Cadmium	0.0500	0.0489		mg/L		98	80 - 120
Chromium	0.200	0.195		mg/L		97	80 - 120
Cobalt	0.500	0.486		mg/L		97	80 - 120
Iron	1.00	0.976		mg/L		98	80 - 120
Lead	0.100	0.0990		mg/L		99	80 - 120
Manganese	0.500	0.504		mg/L		101	80 - 120
Nickel	0.500	0.485		mg/L		97	80 - 120
Selenium	0.100	0.0880		mg/L		88	80 - 120
Silver	0.0500	0.0491		mg/L		98	80 - 120
Zinc	0.500	0.483	J	mg/L		97	80 - 120

Lab Sample ID: MB 500-516943/1-A
Matrix: Solid
Analysis Batch: 517287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516943

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Arsenic	<1.0		1.0	0.34	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Barium	<1.0		1.0	0.11	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Beryllium	<0.40		0.40	0.093	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Boron	<5.0		5.0	0.47	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Cadmium	0.0717	J	0.20	0.036	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Calcium	<20		20	3.4	mg/Kg		11/22/19 17:38	11/25/19 17:01	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-516943/1-A
Matrix: Solid
Analysis Batch: 517287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516943

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	0.511	J	1.0	0.50	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Cobalt	<0.50		0.50	0.13	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Copper	<1.0		1.0	0.28	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Iron	<20		20	10	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Lead	<0.50		0.50	0.23	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Magnesium	<10		10	5.0	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Manganese	<1.0		1.0	0.15	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Nickel	<1.0		1.0	0.29	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Potassium	<50		50	18	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Silver	<0.50		0.50	0.13	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Sodium	<100		100	15	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Thallium	<1.0		1.0	0.50	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Vanadium	<0.50		0.50	0.12	mg/Kg		11/22/19 17:38	11/25/19 17:01	1
Zinc	<2.0		2.0	0.88	mg/Kg		11/22/19 17:38	11/25/19 17:01	1

Lab Sample ID: LCS 500-516943/2-A
Matrix: Solid
Analysis Batch: 517287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516943

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.6		mg/Kg		97	80 - 120
Arsenic	10.0	9.14		mg/Kg		91	80 - 120
Barium	200	189		mg/Kg		94	80 - 120
Beryllium	5.00	4.79		mg/Kg		96	80 - 120
Boron	100	84.3		mg/Kg		84	80 - 120
Cadmium	5.00	4.67		mg/Kg		93	80 - 120
Calcium	1000	936		mg/Kg		94	80 - 120
Chromium	20.0	20.0		mg/Kg		100	80 - 120
Cobalt	50.0	48.6		mg/Kg		97	80 - 120
Copper	25.0	24.7		mg/Kg		99	80 - 120
Iron	100	97.0		mg/Kg		97	80 - 120
Lead	10.0	9.56		mg/Kg		96	80 - 120
Magnesium	1000	930		mg/Kg		93	80 - 120
Manganese	50.0	47.7		mg/Kg		95	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Potassium	1000	975		mg/Kg		97	80 - 120
Selenium	10.0	8.41		mg/Kg		84	80 - 120
Silver	5.00	4.72		mg/Kg		94	80 - 120
Sodium	1000	988		mg/Kg		99	80 - 120
Thallium	10.0	9.05		mg/Kg		91	80 - 120
Vanadium	50.0	48.8		mg/Kg		98	80 - 120
Zinc	50.0	49.2		mg/Kg		98	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-515964/1-C
Matrix: Solid
Analysis Batch: 517660

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516484

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/20/19 16:20	11/27/19 12:05	1
Boron	<0.50		0.50	0.050	mg/L		11/20/19 16:20	11/27/19 12:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/20/19 16:20	11/27/19 12:05	1
Chromium	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:05	1
Cobalt	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:05	1
Iron	<0.40		0.40	0.20	mg/L		11/20/19 16:20	11/27/19 12:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/20/19 16:20	11/27/19 12:05	1
Manganese	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:05	1
Nickel	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:05	1
Selenium	<0.050		0.050	0.020	mg/L		11/20/19 16:20	11/27/19 12:05	1
Silver	<0.025		0.025	0.010	mg/L		11/20/19 16:20	11/27/19 12:05	1
Zinc	<0.50		0.50	0.020	mg/L		11/20/19 16:20	11/27/19 12:05	1

Lab Sample ID: 500-173437-14 MS
Matrix: Solid
Analysis Batch: 517660

Client Sample ID: 2615V2-AI-B04 (18-24)
Prep Type: TCLP
Prep Batch: 516484

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Barium	0.64		0.500	1.12		mg/L		96	75 - 125
Beryllium	<0.0040		0.0500	0.0487		mg/L		97	75 - 125
Boron	0.085	J	1.00	1.04		mg/L		96	75 - 125
Cadmium	<0.0050		0.0500	0.0560		mg/L		112	75 - 125
Chromium	<0.025		0.200	0.187		mg/L		94	75 - 125
Cobalt	0.017	J	0.500	0.533		mg/L		103	75 - 125
Iron	<0.40		1.00	1.05		mg/L		105	75 - 125
Lead	<0.0075		0.100	0.0997		mg/L		100	75 - 125
Manganese	1.8		0.500	2.35		mg/L		106	75 - 125
Nickel	0.048		0.500	0.560		mg/L		102	75 - 125
Selenium	<0.050		0.100	0.119		mg/L		119	75 - 125
Silver	<0.025		0.0500	0.0619		mg/L		124	75 - 125
Zinc	<0.50		0.500	0.547		mg/L		109	75 - 125

Lab Sample ID: 500-173437-14 DU
Matrix: Solid
Analysis Batch: 517660

Client Sample ID: 2615V2-AI-B04 (18-24)
Prep Type: TCLP
Prep Batch: 516484

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Barium	0.64		0.613		mg/L		4	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.085	J	0.0820	J	mg/L		4	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.017	J	0.0159	J	mg/L		4	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.77		mg/L		3	20
Nickel	0.048		0.0434		mg/L		11	20
Selenium	<0.050		<0.050		mg/L		NC	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173437-14 DU
Matrix: Solid
Analysis Batch: 517660

Client Sample ID: 2615V2-AI-B04 (18-24)
Prep Type: TCLP
Prep Batch: 516484

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50		<0.50		mg/L		NC	20

Lab Sample ID: LB 500-515962/1-B
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 516253

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/19/19 16:00	11/20/19 11:56	1
Manganese	<0.025		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 11:56	1
Nickel	<0.025		0.025	0.010	mg/L		11/19/19 16:00	11/20/19 11:56	1

Lab Sample ID: 500-173437-15 MS
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: 2615V2-AI-B04 (24-30)
Prep Type: SPLP East
Prep Batch: 516253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	<0.0075		0.100	0.108		mg/L		108	75 - 125
Manganese	0.017	J	0.500	0.557		mg/L		108	75 - 125
Nickel	<0.025		0.500	0.530		mg/L		106	75 - 125

Lab Sample ID: 500-173437-15 DU
Matrix: Solid
Analysis Batch: 516528

Client Sample ID: 2615V2-AI-B04 (24-30)
Prep Type: SPLP East
Prep Batch: 516253

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.017	J	0.0168	J	mg/L		2	20
Nickel	<0.025		<0.025		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-516484/2-A
Matrix: Solid
Analysis Batch: 516998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.477		mg/L		95	80 - 120
Thallium	0.100	0.0953		mg/L		95	80 - 120

Lab Sample ID: LB 500-515964/1-C
Matrix: Solid
Analysis Batch: 516998

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516484

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/20/19 16:20	11/23/19 11:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/20/19 16:20	11/23/19 11:59	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-173437-14 MS
Matrix: Solid
Analysis Batch: 516998

Client Sample ID: 2615V2-AI-B04 (18-24)
Prep Type: TCLP
Prep Batch: 516484

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Antimony	<0.0060		0.500	0.443		mg/L		89		75 - 125
Thallium	<0.0020		0.100	0.0842		mg/L		84		75 - 125

Lab Sample ID: 500-173437-14 DU
Matrix: Solid
Analysis Batch: 516998

Client Sample ID: 2615V2-AI-B04 (18-24)
Prep Type: TCLP
Prep Batch: 516484

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-516383/12-A
Matrix: Solid
Analysis Batch: 516627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516383

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:39	1

Lab Sample ID: LCS 500-516383/13-A
Matrix: Solid
Analysis Batch: 516627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516383

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
	Added	Result	Qualifier					
Mercury	0.00200	0.00213		mg/L		107		80 - 120

Lab Sample ID: LB 500-515964/1-B
Matrix: Solid
Analysis Batch: 516627

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516383

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/20/19 09:25	11/21/19 07:42	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-516180/12-A
Matrix: Solid
Analysis Batch: 516389

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516180

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.00592	J	0.017	0.0056	mg/Kg		11/19/19 14:35	11/20/19 07:41	1

Lab Sample ID: LCS 500-516180/13-A
Matrix: Solid
Analysis Batch: 516389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516180

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
	Added	Result	Qualifier					
Mercury	0.167	0.171		mg/Kg		103		80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-173437-7 MS
Matrix: Solid
Analysis Batch: 516389

Client Sample ID: 2615V2-AI-B12 (6-12)
Prep Type: Total/NA
Prep Batch: 516180

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.026	B	0.0930	0.109		mg/Kg	☼	89	75 - 125

Lab Sample ID: 500-173437-7 MSD
Matrix: Solid
Analysis Batch: 516389

Client Sample ID: 2615V2-AI-B12 (6-12)
Prep Type: Total/NA
Prep Batch: 516180

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.026	B	0.0931	0.105		mg/Kg	☼	86	75 - 125	3	20

Lab Sample ID: 500-173437-7 DU
Matrix: Solid
Analysis Batch: 516389

Client Sample ID: 2615V2-AI-B12 (6-12)
Prep Type: Total/NA
Prep Batch: 516180

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.026	B	0.0219		mg/Kg	☼	16	20

Method: 9045D - pH

Lab Sample ID: 500-173437-15 DU
Matrix: Solid
Analysis Batch: 516400

Client Sample ID: 2615V2-AI-B04 (24-30)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.4		7.4		SU		0.1	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Date Collected: 11/13/19 11:00

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:04	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:13	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:01	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 07:44	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400	(Start) 11/20/19 13:53 (End) 11/20/19 13:55	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B23 (0-6)

Lab Sample ID: 500-173437-1

Date Collected: 11/13/19 11:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 20:58	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 15:14	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 17:52	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 07:50	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:17	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:18	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:02	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 07:46	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 13:55		
					(End)	11/20/19 13:57		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B23 (6-12)

Lab Sample ID: 500-173437-2

Date Collected: 11/13/19 11:05

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516315	11/20/19 21:24	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 15:41	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 17:56	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 07:52	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Date Collected: 11/13/19 11:10

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:21	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:22	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:03	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 07:47	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 13:57		
					(End)	11/20/19 13:59		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (12-18)

Lab Sample ID: 500-173437-3

Date Collected: 11/13/19 11:10

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 03:54	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 11:08	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:00	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:16	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 07:54	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:26	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:27	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:04	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 07:49	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400	(Start) 11/20/19 13:59 (End) 11/20/19 14:01	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 04:19	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 10:42	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:12	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B23 (18-24)

Lab Sample ID: 500-173437-4

Date Collected: 11/13/19 11:15

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:20	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 07:56	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Date Collected: 11/13/19 11:20

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:30	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:32	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:05	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 07:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:03		
					(End)	11/20/19 14:05		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B23 (24-30)

Lab Sample ID: 500-173437-5

Date Collected: 11/13/19 11:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 04:44	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 16:08	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:16	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:24	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 07:58	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Date Collected: 11/13/19 12:40

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:34	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:36	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:06	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 07:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400	(Start) 11/20/19 14:05 (End) 11/20/19 14:06	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B12 (0-6)

Lab Sample ID: 500-173437-6

Date Collected: 11/13/19 12:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 05:10	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 16:35	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:20	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:28	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:05	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:39	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:41	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:07	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:06		
					(End)	11/20/19 14:08		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B12 (6-12)

Lab Sample ID: 500-173437-7

Date Collected: 11/13/19 12:45

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 05:35	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 17:02	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:24	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:40	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:07	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:43	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:45	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:08	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:04	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B12 (12-18)

Lab Sample ID: 500-173437-8

Date Collected: 11/13/19 12:50

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 06:00	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 17:29	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:28	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:44	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:15	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Date Collected: 11/13/19 12:55

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:47	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 12:58	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:11	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:10		
					(End)	11/20/19 14:12		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (18-24)

Lab Sample ID: 500-173437-9

Date Collected: 11/13/19 12:55

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 06:26	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 17:56	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:32	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:48	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:17	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:51	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 13:03	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:12	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:07	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400	(Start) 11/20/19 14:12 (End) 11/20/19 14:14	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 06:51	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 18:24	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:36	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B12 (24-30)

Lab Sample ID: 500-173437-10

Date Collected: 11/13/19 13:00

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:52	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:19	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Date Collected: 11/13/19 14:20

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 12:56	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 13:07	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:13	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:09	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:14		
					(End)	11/20/19 14:16		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B04 (0-6)

Lab Sample ID: 500-173437-11

Date Collected: 11/13/19 14:20

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 07:17	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 18:51	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:40	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:22	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Date Collected: 11/13/19 14:25

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 13:09	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 13:12	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:14	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:10	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:16		
					(End)	11/20/19 14:18		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B04 (6-12)

Lab Sample ID: 500-173437-12

Date Collected: 11/13/19 14:25

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516503	11/21/19 07:42	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 19:18	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:44	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 12:56	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:24	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 13:13	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 13:16	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:15	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:12	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:17		
					(End)	11/20/19 14:19		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B04 (12-18)

Lab Sample ID: 500-173437-13

Date Collected: 11/13/19 14:30

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516539	11/21/19 12:01	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 11:36	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 18:48	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 13:00	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:30	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 13:17	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 13:21	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:16	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:13	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B04 (18-24)

Lab Sample ID: 500-173437-14

Date Collected: 11/13/19 14:35

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516539	11/21/19 12:27	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 19:45	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 19:00	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517419	11/26/19 13:04	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 13:08	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:32	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Date Collected: 11/13/19 14:40

Matrix: Solid

Date Received: 11/13/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			515962	11/18/19 11:15	GCA	TAL CHI
SPLP East	Prep	3010A			516253	11/19/19 16:00	BDE	TAL CHI
SPLP East	Analysis	6010B		1	516528	11/20/19 13:21	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517660	11/27/19 13:39	EEN	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	3010A			516484	11/20/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:21	FXG	TAL CHI
TCLP	Leach	1311			515964	11/18/19 11:15	GCA	TAL CHI
TCLP	Prep	7470A			516383	11/20/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	516627	11/21/19 08:15	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516400		SMO	TAL CHI
					(Start)	11/20/19 14:23		
					(End)	11/20/19 14:25		
Total/NA	Analysis	Moisture		1	515617	11/15/19 14:30	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Client Sample ID: 2615V2-AI-B04 (24-30)

Lab Sample ID: 500-173437-15

Date Collected: 11/13/19 14:40

Matrix: Solid

Date Received: 11/13/19 15:50

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515820	11/13/19 17:24	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516539	11/21/19 12:52	PMF	TAL CHI
Total/NA	Prep	3541			516538	11/21/19 07:55	DX	TAL CHI
Total/NA	Analysis	8270D		1	517128	11/25/19 12:03	AJD	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517287	11/25/19 19:04	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517419	11/26/19 13:12	JEF	TAL CHI
Total/NA	Prep	3050B			516943	11/22/19 17:38	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517419	11/26/19 13:16	JEF	TAL CHI
Total/NA	Prep	7471B			516180	11/19/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	516389	11/20/19 08:34	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173437-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL T

2417 Bond Street, University Park, IL 6048
Phone: 708.534.5200 Fax: 708.534.5



500-173437 COC

Report To (optional)
Contact: D. TIERBOUT
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173437

Chain of Custody Number: _____

Page 1 of 2

Temperature °C of Cooler: 6.1/10.8

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
ENE		1009341.0447.01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		# of Containers		Matrix					
176-001-047E											
Project Location/State		Lab Project #		Date		Time					
CHICAGO IL											
Sampler		Lab PM		Date		Time					
A. HAPPEL		R. WRIGHT									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
1		2615V2-AE-B23 (0-6)	11/13/19	1100	2	S	VOCs (826061 5035)	SVOCs (82701)	TOTAL METALS, PH (69103/6004 747-15)	TCUR METALS (1311/6908/6004 747-044)	
2		2615V2-AE-B23 (6-12)	11/13/19	1105	2	S					
3		2615V2-AE-B23 (12-18)	11/13/19	1110	2	S					
4		2615V2-AE-B23 (18-24)	11/13/19	1115	2	S					
5		2615V2-AE-B23 (24-30)	11/13/19	1120	2	S					
6		2615V2-AE-B12 (0-4)	11/13/19	1240	2	S					
7		2615V2-AE-B12 (6-12)	11/13/19	1245	2	S					
8		2615V2-AE-B12 (12-18)	11/13/19	1250	2	S					
9		2615V2-AE-B12 (18-24)	11/13/19	1255	2	S					
10		2615V2-AE-B12 (24-30)	11/13/19	1300	2	S					

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company ENE	Date 11/13/19	Time 1455	Received By <u>[Signature]</u>	Company TA	Date 11/13/19	Time 1455
Relinquished By <u>[Signature]</u>	Company TA	Date 11/13/19	Time 1550	Received By <u>[Signature]</u>	Company TA CRT	Date 11/13/19	Time 1550
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped: _____
Hand Delivered: _____

Matrix Key
WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments: _____
Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: D. TIEBOUT
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173437

Chain of Custody Number: _____

Page 2 of 2

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
E+E		1009341,0447.01				VOCs (806 US 5035)		INT2 (82701)			
Project Name		Lab Project #		# of Containers		TOTAL METALS		FCLP METALS			
174-001-047E						PH(60103/6004)		311/928/80701			
Project Location/State		Lab PM		Matrix							
CHICAGO IL		R. WRIGHT									
Sampler		Date		Time							
A. HAPPEL		11/13/19		1420							
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
11		2615V2-AI-B04 (0-6)	11/13/19	1420	2	S	X	X	X	X	
12		2615V2-AI-B04 (6-12)	11/13/19	1425	2	S	X	X	X	X	
13		2615V2-AI-B04 (12-18)	11/13/19	1430	2	S	X	X	X	X	
14		2615V2-AI-B04 (18-24)	11/13/19	1435	2	S	X	X	X	X	
15		2615V2-AI-B04 (24-30)	11/13/19	1440	2	S	X	X	X	X	

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)
 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company: <u>E+E</u> Date: <u>11/13/19</u> Time: <u>1435</u>	Received By <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/13/19</u> Time: <u>1455</u>	Lab Courier <u>TA</u>
Relinquished By <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/13/19</u> Time: <u>1550</u>	Received By <u>[Signature]</u> Company: <u>TA-CHA</u> Date: <u>11/13/19</u> Time: <u>1550</u>	Shipped _____
Relinquished By _____	Received By _____	Hand Delivered _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173437-1

Login Number: 173437

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	6.1,6.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173576-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/2/2019 4:26:47 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Job ID: 500-173576-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173576-1

Receipt

The samples were received on 11/15/2019 11:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.2° C.

GC/MS VOA

Method 8260B: Internal standard (1,4-Dichlorobenzene-d4) response was outside of acceptance limits for the following samples: 2615V2-01-B61 (0-5) (500-173576-7). The samples have non-detect for associated analytes for this Internal standard: therefore the results were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 517113 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-517113/2-A)

Method 8270D: The following sample contained one base surrogate outside acceptance limits: 2615V2-01-B62 (0-5) (500-173576-8). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-173576-E-1-G MS) and (500-173576-E-1-H MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The method blank for preparation batch 500-516431 and 500-516698 contained Lead above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 6010B: The continuing calibration blank (CCB) for 500-517892 contained magnesium above the reporting limit (RL). Associated sample 2615V2-01-B56 (0-5) (500-173576-4), 2615V2-01-B60 (0-5) (500-173576-5), 2615V2-01-B60 (5-11) (500-173576-6) and 2615V2-01-B62 (0-5) (500-173576-8) was not re-analyzed because results were greater than 10X the value found in the CCB.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.10		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.014	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.67	J B	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.3		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	12		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	80000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	13	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	41000		55	27	mg/Kg	10	☼	6010B	Total/NA
Manganese	340		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	27		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.61		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	520	B	55	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.74		0.55	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	44		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.069		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.043		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0087	J	0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.098		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.014	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.027	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.52	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.6		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	62000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	5.8	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (5-10) (Continued)

Lab Sample ID: 500-173576-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	420		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.87		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	420	B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.88		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.052		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.11		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.033	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.75	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.9		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	60000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.1		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	3.0		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	210	B	60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	66		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (10-15) (Continued)

Lab Sample ID: 500-173576-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.045		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.020	0.0065	mg/Kg	1	*	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.57	J B	1.0	0.20	mg/Kg	1	*	6010B	Total/NA
Arsenic	0.47	J	0.50	0.17	mg/Kg	1	*	6010B	Total/NA
Barium	1.2		0.50	0.057	mg/Kg	1	*	6010B	Total/NA
Boron	7.2		2.5	0.23	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.094	J B	0.10	0.018	mg/Kg	1	*	6010B	Total/NA
Calcium	220000	B	100	17	mg/Kg	10	*	6010B	Total/NA
Chromium	0.99	B	0.50	0.25	mg/Kg	1	*	6010B	Total/NA
Cobalt	0.56		0.25	0.066	mg/Kg	1	*	6010B	Total/NA
Copper	0.82		0.50	0.14	mg/Kg	1	*	6010B	Total/NA
Iron	1200		10	5.2	mg/Kg	1	*	6010B	Total/NA
Lead	1.4		0.25	0.12	mg/Kg	1	*	6010B	Total/NA
Magnesium	140000	^	50	25	mg/Kg	10	*	6010B	Total/NA
Manganese	100		0.50	0.073	mg/Kg	1	*	6010B	Total/NA
Nickel	0.39	J	0.50	0.15	mg/Kg	1	*	6010B	Total/NA
Potassium	180		25	8.9	mg/Kg	1	*	6010B	Total/NA
Selenium	0.51		0.50	0.30	mg/Kg	1	*	6010B	Total/NA
Silver	0.21	J	0.25	0.065	mg/Kg	1	*	6010B	Total/NA
Sodium	470	B	50	7.4	mg/Kg	1	*	6010B	Total/NA
Vanadium	0.65		0.25	0.059	mg/Kg	1	*	6010B	Total/NA
Zinc	1.7		1.0	0.44	mg/Kg	1	*	6010B	Total/NA
Boron	0.056	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.55		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.021	J	0.50	0.020	mg/L	1		6010B	TCLP
pH	8.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.082		0.025	0.011	mg/Kg	1	*	8260B	Total/NA
Methylene Chloride	0.0026	J	0.0063	0.0025	mg/Kg	1	*	8260B	Total/NA
Naphthalene	0.029	J	0.034	0.0053	mg/Kg	1	*	8270D	Total/NA
2-Methylnaphthalene	0.16		0.070	0.0064	mg/Kg	1	*	8270D	Total/NA
Acenaphthene	0.029	J	0.034	0.0062	mg/Kg	1	*	8270D	Total/NA
Fluorene	0.041		0.034	0.0049	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.30		0.034	0.0048	mg/Kg	1	*	8270D	Total/NA
Anthracene	0.041		0.034	0.0058	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.40		0.034	0.0064	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.76		0.034	0.0069	mg/Kg	1	*	8270D	Total/NA
Benzo[a]anthracene	0.11		0.034	0.0047	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.28		0.034	0.0095	mg/Kg	1	*	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.12	J	0.17	0.063	mg/Kg	1	*	8270D	Total/NA
Antimony	0.64	J B	1.0	0.20	mg/Kg	1	*	6010B	Total/NA
Arsenic	0.98		0.52	0.18	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (0-5) (Continued)

Lab Sample ID: 500-173576-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	15		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	13		2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	190000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	22	B	0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.4		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	5.4		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	4200		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	6.1		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	110000	^	52	26	mg/Kg	10	☼	6010B	Total/NA
Manganese	230		0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	4.3		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	490		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.90		0.52	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	0.98		0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	420	B	52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	8.0		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	25		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.41	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J B	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.10	J	0.50	0.020	mg/L	1		6010B	TCLP
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.38	J B	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	0.36	J	0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	1.6		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.080	J	0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	7.6		2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	230000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	1.1	B	0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	0.62		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Iron	990		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	1.1		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	140000	^	52	26	mg/Kg	10	☼	6010B	Total/NA
Manganese	96		0.52	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	0.18	J	0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	170		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.52	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	0.25	J	0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	210	B	52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	0.65		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	1.6		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Boron	0.063	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.44		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (5-11) (Continued)

Lab Sample ID: 500-173576-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.019	J	0.023	0.010	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00077	J	0.0047	0.00075	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.15		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.018	J	0.039	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.054		0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.065		0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.029	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.046		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.57	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.5		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.76		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	20		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.096	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	20	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	22000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	46		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.74		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	3.4		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	2100	B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.078		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.037	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.017	J	0.021	0.0090	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00071	J	0.0041	0.00066	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.030	J	0.033	0.0051	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.14		0.067	0.0061	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B62 (0-5) (Continued)

Lab Sample ID: 500-173576-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.035		0.033	0.0060	mg/Kg	1	*	8270D	Total/NA
Fluorene	0.039		0.033	0.0047	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.31		0.033	0.0046	mg/Kg	1	*	8270D	Total/NA
Anthracene	0.045		0.033	0.0056	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.36		0.033	0.0062	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.68		0.033	0.0066	mg/Kg	1	*	8270D	Total/NA
Benzo[a]anthracene	0.15		0.033	0.0045	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.24		0.033	0.0091	mg/Kg	1	*	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.11	J	0.17	0.061	mg/Kg	1	*	8270D	Total/NA
Benzo[b]fluoranthene	0.25		0.033	0.0072	mg/Kg	1	*	8270D	Total/NA
Benzo[k]fluoranthene	0.19		0.033	0.0098	mg/Kg	1	*	8270D	Total/NA
Benzo[a]pyrene	0.17		0.033	0.0064	mg/Kg	1	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.10		0.033	0.0086	mg/Kg	1	*	8270D	Total/NA
Dibenz(a,h)anthracene	0.021	J	0.033	0.0064	mg/Kg	1	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.042		0.033	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.53	J B	0.97	0.19	mg/Kg	1	*	6010B	Total/NA
Arsenic	0.79		0.49	0.17	mg/Kg	1	*	6010B	Total/NA
Barium	6.4		0.49	0.055	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.18	J	0.19	0.045	mg/Kg	1	*	6010B	Total/NA
Boron	16		2.4	0.23	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.13	B	0.097	0.017	mg/Kg	1	*	6010B	Total/NA
Calcium	190000	B	97	16	mg/Kg	10	*	6010B	Total/NA
Chromium	6.2	B	0.49	0.24	mg/Kg	1	*	6010B	Total/NA
Cobalt	1.2		0.24	0.064	mg/Kg	1	*	6010B	Total/NA
Copper	2.6		0.49	0.14	mg/Kg	1	*	6010B	Total/NA
Iron	2500		9.7	5.0	mg/Kg	1	*	6010B	Total/NA
Lead	4.5		0.24	0.11	mg/Kg	1	*	6010B	Total/NA
Magnesium	120000	^	49	24	mg/Kg	10	*	6010B	Total/NA
Manganese	200		0.49	0.070	mg/Kg	1	*	6010B	Total/NA
Nickel	3.9		0.49	0.14	mg/Kg	1	*	6010B	Total/NA
Potassium	640		24	8.6	mg/Kg	1	*	6010B	Total/NA
Selenium	0.42	J	0.49	0.29	mg/Kg	1	*	6010B	Total/NA
Silver	1.4		0.24	0.063	mg/Kg	1	*	6010B	Total/NA
Sodium	270	B	49	7.2	mg/Kg	1	*	6010B	Total/NA
Vanadium	9.0		0.24	0.057	mg/Kg	1	*	6010B	Total/NA
Zinc	13		0.97	0.43	mg/Kg	1	*	6010B	Total/NA
Barium	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.090	J B	0.50	0.050	mg/L	1		6010B	TCLP
Iron	1.5		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	TCLP
pH	8.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.18		0.040	0.0056	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.019	J	0.040	0.0075	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.034	J	0.040	0.0080	mg/Kg	1	*	8270D	Total/NA
Benzo[a]anthracene	0.0087	J	0.040	0.0054	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.041		0.040	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.45	J B	1.2	0.24	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B63 (0-5) (Continued)

Lab Sample ID: 500-173576-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.8		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	68		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.82		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	20		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	33000	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	22	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	17		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	22000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	47		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.88		0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	3.6		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	2500	B	62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J B	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.057		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.14		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.029	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.43		0.025	0.010	mg/L	1		6010B	SPLP East
Nickel	0.091		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173576-1	2615V2-01-B47 (0-5)	Solid	11/14/19 22:40	11/15/19 11:08	
500-173576-2	2615V2-01-B47 (5-10)	Solid	11/14/19 22:45	11/15/19 11:08	
500-173576-3	2615V2-01-B47 (10-15)	Solid	11/14/19 22:50	11/15/19 11:08	
500-173576-4	2615V2-01-B56 (0-5)	Solid	11/14/19 23:00	11/15/19 11:08	
500-173576-5	2615V2-01-B60 (0-5)	Solid	11/15/19 00:00	11/15/19 11:08	
500-173576-6	2615V2-01-B60 (5-11)	Solid	11/15/19 00:05	11/15/19 11:08	
500-173576-7	2615V2-01-B61 (0-5)	Solid	11/15/19 00:10	11/15/19 11:08	
500-173576-8	2615V2-01-B62 (0-5)	Solid	11/15/19 00:15	11/15/19 11:08	
500-173576-9	2615V2-01-B63 (0-5)	Solid	11/15/19 00:40	11/15/19 11:08	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Date Collected: 11/14/19 22:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/15/19 19:14	11/21/19 14:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		75 - 131	11/15/19 19:14	11/21/19 14:17	1
Dibromofluoromethane	97		75 - 126	11/15/19 19:14	11/21/19 14:17	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	11/15/19 19:14	11/21/19 14:17	1
Toluene-d8 (Surr)	100		75 - 124	11/15/19 19:14	11/21/19 14:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Date Collected: 11/14/19 22:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 86.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Hexachlorocyclopentadiene	<0.77	F1	0.77	0.22	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,4-Dinitrophenol	<0.77	* F1	0.77	0.67	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4-Nitrophenol	<0.77	F2	0.77	0.36	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
N-Nitrosodiphenylamine	<0.19	F1	0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
4,6-Dinitro-2-methylphenol	<0.77	F2	0.77	0.31	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Phenanthrene	0.10		0.038	0.0053	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Fluoranthene	0.014	J	0.038	0.0071	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Benzof[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Date Collected: 11/14/19 22:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 86.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/25/19 07:37	11/27/19 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				11/25/19 07:37	11/27/19 15:26	1
Phenol-d5	78		30 - 153				11/25/19 07:37	11/27/19 15:26	1
Nitrobenzene-d5	86		37 - 147				11/25/19 07:37	11/27/19 15:26	1
2-Fluorobiphenyl	104		43 - 145				11/25/19 07:37	11/27/19 15:26	1
2,4,6-Tribromophenol	83		31 - 143				11/25/19 07:37	11/27/19 15:26	1
Terphenyl-d14	107		42 - 157				11/25/19 07:37	11/27/19 15:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.67	J B	1.1	0.21	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Arsenic	6.3		0.55	0.19	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Barium	36		0.55	0.063	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Beryllium	0.43		0.22	0.051	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Boron	12		2.8	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Cadmium	0.14	B	0.11	0.020	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Calcium	80000	B	110	19	mg/Kg	☼	11/26/19 18:00	11/29/19 11:12	10
Chromium	13	B	0.55	0.27	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Cobalt	10		0.28	0.072	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Copper	22		0.55	0.15	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Iron	16000		11	5.7	mg/Kg	☼	11/26/19 18:00	11/29/19 11:08	1
Lead	11		0.28	0.13	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Magnesium	41000		55	27	mg/Kg	☼	11/26/19 18:00	11/29/19 11:12	10
Manganese	340		0.55	0.080	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Nickel	27		0.55	0.16	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Potassium	2200		28	9.8	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Selenium	0.61		0.55	0.32	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Silver	2.1		0.28	0.071	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Sodium	520	B	55	8.2	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Thallium	0.74		0.55	0.28	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Vanadium	14		0.28	0.065	mg/Kg	☼	11/26/19 18:00	11/27/19 13:38	1
Zinc	44		1.1	0.48	mg/Kg	☼	11/26/19 18:00	11/29/19 11:08	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:32	1
Boron	0.084	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Date Collected: 11/14/19 22:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 86.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:32	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:32	1
Cobalt	0.027		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:32	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:32	1
Manganese	1.9		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:32	1
Nickel	0.069		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:32	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:32	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:32	1
Zinc	<0.50		0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.043		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.017	0.0058	mg/Kg	☼	11/25/19 14:35	11/26/19 09:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			11/21/19 14:02	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0087	J	0.019	0.0081	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,3-Dichloropropane, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	11/15/19 19:14	11/21/19 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	11/15/19 19:14	11/21/19 14:43	1
Dibromofluoromethane	95		75 - 126	11/15/19 19:14	11/21/19 14:43	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/15/19 19:14	11/21/19 14:43	1
Toluene-d8 (Surr)	96		75 - 124	11/15/19 19:14	11/21/19 14:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Phenanthrene	0.098		0.038	0.0054	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Pyrene	0.014	J	0.038	0.0077	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Benzof[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.027	J	0.038	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	11/25/19 07:37	11/27/19 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		31 - 166	11/25/19 07:37	11/27/19 15:49	1
Phenol-d5	73		30 - 153	11/25/19 07:37	11/27/19 15:49	1
Nitrobenzene-d5	79		37 - 147	11/25/19 07:37	11/27/19 15:49	1
2-Fluorobiphenyl	97		43 - 145	11/25/19 07:37	11/27/19 15:49	1
2,4,6-Tribromophenol	84		31 - 143	11/25/19 07:37	11/27/19 15:49	1
Terphenyl-d14	109		42 - 157	11/25/19 07:37	11/27/19 15:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J B	1.1	0.22	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Arsenic	8.6		0.56	0.19	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Barium	39		0.56	0.064	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Beryllium	0.55		0.22	0.052	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Boron	14		2.8	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Cadmium	0.15	B	0.11	0.020	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Calcium	62000	B	110	19	mg/Kg	☼	11/26/19 18:00	11/29/19 11:38	10
Chromium	16	B	0.56	0.28	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Cobalt	15		0.28	0.074	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Copper	33		0.56	0.16	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Iron	20000		11	5.8	mg/Kg	☼	11/26/19 18:00	11/29/19 11:34	1
Lead	16		0.28	0.13	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Magnesium	28000		5.6	2.8	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Manganese	420		0.56	0.081	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Nickel	39		0.56	0.16	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Potassium	2600		28	9.9	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Selenium	0.87		0.56	0.33	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Silver	2.7		0.28	0.072	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Sodium	420	B	56	8.3	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Thallium	0.88		0.56	0.28	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Vanadium	18		0.28	0.066	mg/Kg	☼	11/26/19 18:00	11/27/19 13:42	1
Zinc	48		1.1	0.49	mg/Kg	☼	11/26/19 18:00	11/29/19 11:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:36	1
Boron	0.11	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 81.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:36	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:36	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:36	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:36	1
Manganese	2.1		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:36	1
Nickel	0.052		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:36	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:36	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:36	1
Zinc	<0.50		0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:36	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.030		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.020	0.0065	mg/Kg	☼	11/25/19 14:35	11/26/19 09:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			11/21/19 14:05	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0092	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
2-Butanone (MEK)	<0.0053		0.0053	0.0024	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,1-Dichloroethane	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,2-Dichloroethane	<0.0053		0.0053	0.0017	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,1-Dichloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00094	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00091	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Vinyl acetate	<0.0053		0.0053	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Vinyl chloride	<0.0021		0.0021	0.00094	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1
Xylenes, Total	<0.0042		0.0042	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 15:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	11/15/19 19:14	11/21/19 15:08	1
Dibromofluoromethane	93		75 - 126	11/15/19 19:14	11/21/19 15:08	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/15/19 19:14	11/21/19 15:08	1
Toluene-d8 (Surr)	94		75 - 124	11/15/19 19:14	11/21/19 15:08	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,4-Dinitrophenol	<0.79	*	0.79	0.69	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Phenanthrene	0.11		0.039	0.0055	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.033	J	0.039	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 16:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		31 - 166				11/25/19 07:37	11/27/19 16:13	1
Phenol-d5	72		30 - 153				11/25/19 07:37	11/27/19 16:13	1
Nitrobenzene-d5	76		37 - 147				11/25/19 07:37	11/27/19 16:13	1
2-Fluorobiphenyl	95		43 - 145				11/25/19 07:37	11/27/19 16:13	1
2,4,6-Tribromophenol	78		31 - 143				11/25/19 07:37	11/27/19 16:13	1
Terphenyl-d14	108		42 - 157				11/25/19 07:37	11/27/19 16:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.75	J B	1.2	0.23	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Arsenic	7.9		0.60	0.21	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Barium	47		0.60	0.068	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Beryllium	0.59		0.24	0.056	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Boron	18		3.0	0.28	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Cadmium	0.23	B	0.12	0.022	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Calcium	60000	B	120	20	mg/Kg	☼	11/26/19 18:00	11/29/19 11:47	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Cobalt	15		0.30	0.079	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Copper	31		0.60	0.17	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Iron	21000		12	6.2	mg/Kg	☼	11/26/19 18:00	11/29/19 11:43	1
Lead	14		0.30	0.14	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Magnesium	26000		6.0	3.0	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Manganese	370		0.60	0.087	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Nickel	38		0.60	0.17	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Potassium	3100		30	11	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Selenium	1.1		0.60	0.35	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Silver	3.0		0.30	0.077	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Sodium	210	B	60	8.9	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Thallium	1.2		0.60	0.30	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Vanadium	20		0.30	0.071	mg/Kg	☼	11/26/19 18:00	11/27/19 13:46	1
Zinc	66		1.2	0.53	mg/Kg	☼	11/26/19 18:00	11/29/19 11:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:41	1
Boron	0.13	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:41	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:41	1
Cobalt	0.017	J	0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:41	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:41	1
Manganese	2.2		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:41	1
Nickel	0.045		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:41	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:41	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:41	1
Zinc	<0.50		0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:38	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.020	0.0065	mg/Kg	☼	11/25/19 14:35	11/26/19 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/21/19 14:08	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Date Collected: 11/14/19 23:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 96.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0091	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	11/15/19 19:14	11/21/19 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	11/15/19 19:14	11/21/19 15:34	1
Dibromofluoromethane	91		75 - 126	11/15/19 19:14	11/21/19 15:34	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/15/19 19:14	11/21/19 15:34	1
Toluene-d8 (Surr)	92		75 - 124	11/15/19 19:14	11/21/19 15:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.075	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Date Collected: 11/14/19 23:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 96.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2-Methylphenol	<0.17		0.17	0.054	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
N-Nitrosodi-n-propylamine	<0.068		0.068	0.041	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Nitrobenzene	<0.033		0.033	0.0084	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Naphthalene	<0.033		0.033	0.0052	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,4-Dichlorophenol	<0.33		0.33	0.080	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4-Chloroaniline	<0.68		0.68	0.16	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,4,6-Trichlorophenol	<0.33		0.33	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,4,5-Trichlorophenol	<0.33		0.33	0.077	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Hexachlorocyclopentadiene	<0.68		0.68	0.19	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2-Methylnaphthalene	<0.068		0.068	0.0062	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,6-Dinitrotoluene	<0.17		0.17	0.066	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,4-Dinitrophenol	<0.68	*	0.68	0.59	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4-Nitrophenol	<0.68		0.68	0.32	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Fluorene	<0.033		0.033	0.0047	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Hexachlorobenzene	<0.068		0.068	0.0078	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Diethyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Pentachlorophenol	<0.68		0.68	0.54	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
4,6-Dinitro-2-methylphenol	<0.68		0.68	0.27	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Phenanthrene	<0.033		0.033	0.0047	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Anthracene	<0.033		0.033	0.0056	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Carbazole	<0.17		0.17	0.084	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Pyrene	<0.033		0.033	0.0067	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Butyl benzyl phthalate	<0.17		0.17	0.064	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Benzof[a]anthracene	<0.033		0.033	0.0045	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Date Collected: 11/14/19 23:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 96.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.033		0.033	0.0092	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Benzo[k]fluoranthene	<0.033		0.033	0.0099	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Benzo[a]pyrene	<0.033		0.033	0.0065	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0087	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0065	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
3 & 4 Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	11/25/19 07:37	11/27/19 13:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		31 - 166				11/25/19 07:37	11/27/19 13:50	1
Phenol-d5	66		30 - 153				11/25/19 07:37	11/27/19 13:50	1
Nitrobenzene-d5	81		37 - 147				11/25/19 07:37	11/27/19 13:50	1
2-Fluorobiphenyl	93		43 - 145				11/25/19 07:37	11/27/19 13:50	1
2,4,6-Tribromophenol	75		31 - 143				11/25/19 07:37	11/27/19 13:50	1
Terphenyl-d14	108		42 - 157				11/25/19 07:37	11/27/19 13:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J B	1.0	0.20	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Arsenic	0.47	J	0.50	0.17	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Barium	1.2		0.50	0.057	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Beryllium	<0.20		0.20	0.047	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Boron	7.2		2.5	0.23	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Cadmium	0.094	J B	0.10	0.018	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Calcium	220000	B	100	17	mg/Kg	☼	11/26/19 18:00	11/29/19 11:56	10
Chromium	0.99	B	0.50	0.25	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Cobalt	0.56		0.25	0.066	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Copper	0.82		0.50	0.14	mg/Kg	☼	11/26/19 18:00	11/29/19 11:51	1
Iron	1200		10	5.2	mg/Kg	☼	11/26/19 18:00	11/29/19 11:51	1
Lead	1.4		0.25	0.12	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Magnesium	140000	^	50	25	mg/Kg	☼	11/26/19 18:00	11/29/19 11:56	10
Manganese	100		0.50	0.073	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Nickel	0.39	J	0.50	0.15	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Potassium	180		25	8.9	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Selenium	0.51		0.50	0.30	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Silver	0.21	J	0.25	0.065	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Sodium	470	B	50	7.4	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Vanadium	0.65		0.25	0.059	mg/Kg	☼	11/26/19 18:00	11/27/19 13:50	1
Zinc	1.7		1.0	0.44	mg/Kg	☼	11/26/19 18:00	11/29/19 11:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:45	1
Boron	0.056	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Date Collected: 11/14/19 23:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 96.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:45	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:45	1
Cobalt	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:45	1
Iron	0.55		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:45	1
Manganese	0.25		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:45	1
Nickel	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:45	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:45	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:45	1
Zinc	0.021	J	0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:45	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:33	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016	0.0052	mg/Kg	☼	11/25/19 14:35	11/26/19 09:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.2	0.2	SU			11/21/19 14:15	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 94.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.082		0.025	0.011	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Benzene	<0.0025		0.0025	0.00065	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Bromodichloromethane	<0.0025		0.0025	0.00052	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Bromoform	<0.0025		0.0025	0.00074	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Bromomethane	<0.0063		0.0063	0.0024	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
2-Butanone (MEK)	<0.0063		0.0063	0.0028	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Carbon disulfide	<0.0063		0.0063	0.0013	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Carbon tetrachloride	<0.0025		0.0025	0.00074	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Chlorobenzene	<0.0025		0.0025	0.00094	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Chloroethane	<0.0063		0.0063	0.0019	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Chloroform	<0.0025		0.0025	0.00088	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Chloromethane	<0.0063		0.0063	0.0025	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00076	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Dibromochloromethane	<0.0025		0.0025	0.00083	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,1-Dichloroethane	<0.0025		0.0025	0.00087	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,2-Dichloroethane	<0.0063		0.0063	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,1-Dichloroethene	<0.0025		0.0025	0.00087	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,2-Dichloropropane	<0.0025		0.0025	0.00066	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,3-Dichloropropane, Total	<0.0025		0.0025	0.00089	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
2-Hexanone	<0.0063		0.0063	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Methylene Chloride	0.0026 J		0.0063	0.0025	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
4-Methyl-2-pentanone (MIBK)	<0.0063		0.0063	0.0019	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00074	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Styrene	<0.0025		0.0025	0.00077	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00081	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Tetrachloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Toluene	<0.0025		0.0025	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00089	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,1,1-Trichloroethane	<0.0025		0.0025	0.00085	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Trichloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Vinyl acetate	<0.0063		0.0063	0.0022	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1
Xylenes, Total	<0.0051		0.0051	0.00081	mg/Kg	☼	11/15/19 19:14	11/21/19 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131	11/15/19 19:14	11/21/19 16:00	1
Dibromofluoromethane	91		75 - 126	11/15/19 19:14	11/21/19 16:00	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/15/19 19:14	11/21/19 16:00	1
Toluene-d8 (Surr)	93		75 - 124	11/15/19 19:14	11/21/19 16:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 94.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.042	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Nitrobenzene	<0.034		0.034	0.0087	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Naphthalene	0.029	J	0.034	0.0053	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2-Methylnaphthalene	0.16		0.070	0.0064	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,4-Dinitrophenol	<0.70	*	0.70	0.61	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Acenaphthylene	<0.034		0.034	0.0046	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Acenaphthene	0.029	J	0.034	0.0062	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Fluorene	0.041		0.034	0.0049	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4-Nitroaniline	<0.34		0.34	0.15	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.041	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Phenanthrene	0.30		0.034	0.0048	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Anthracene	0.041		0.034	0.0058	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Fluoranthene	0.40		0.034	0.0064	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Pyrene	0.76		0.034	0.0069	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Benzo[a]anthracene	0.11		0.034	0.0047	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 94.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.28		0.034	0.0095	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Bis(2-ethylhexyl) phthalate	0.12	J	0.17	0.063	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Benzo[b]fluoranthene	<0.034		0.034	0.0075	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Benzo[a]pyrene	<0.034		0.034	0.0067	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0090	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	11/25/19 07:37	11/29/19 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	89		31 - 166				11/25/19 07:37	11/29/19 23:37	1
Phenol-d5	125		30 - 153				11/25/19 07:37	11/29/19 23:37	1
Nitrobenzene-d5	147		37 - 147				11/25/19 07:37	11/29/19 23:37	1
2-Fluorobiphenyl	93		43 - 145				11/25/19 07:37	11/29/19 23:37	1
2,4,6-Tribromophenol	77		31 - 143				11/25/19 07:37	11/29/19 23:37	1
Terphenyl-d14	151		42 - 157				11/25/19 07:37	11/29/19 23:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J B	1.0	0.20	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Arsenic	0.98		0.52	0.18	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Barium	15		0.52	0.059	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Beryllium	0.12	J	0.21	0.048	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Boron	13		2.6	0.24	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Cadmium	0.14	B	0.10	0.019	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Calcium	190000	B	100	18	mg/Kg	☼	11/26/19 18:00	11/29/19 12:04	10
Chromium	22	B	0.52	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Cobalt	1.4		0.26	0.068	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Copper	5.4		0.52	0.15	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Iron	4200		10	5.4	mg/Kg	☼	11/26/19 18:00	11/29/19 12:00	1
Lead	6.1		0.26	0.12	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Magnesium	110000	^	52	26	mg/Kg	☼	11/26/19 18:00	11/29/19 12:04	10
Manganese	230		0.52	0.075	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Nickel	4.3		0.52	0.15	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Potassium	490		26	9.2	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Selenium	0.90		0.52	0.31	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Silver	0.98		0.26	0.067	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Sodium	420	B	52	7.7	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Vanadium	8.0		0.26	0.061	mg/Kg	☼	11/26/19 18:00	11/27/19 13:54	1
Zinc	25		1.0	0.46	mg/Kg	☼	11/26/19 18:00	11/29/19 12:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.41	J	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:49	1
Boron	0.10	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:49	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 94.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:49	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:49	1
Cobalt	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:49	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:49	1
Manganese	1.4		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:49	1
Nickel	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:49	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:49	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:49	1
Zinc	0.10	J	0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:49	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:34	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0058	mg/Kg	☼	11/25/19 14:35	11/26/19 09:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/21/19 14:18	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 93.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0091	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	11/15/19 19:14	11/21/19 16:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131	11/15/19 19:14	11/21/19 16:25	1
Dibromofluoromethane	89		75 - 126	11/15/19 19:14	11/21/19 16:25	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/15/19 19:14	11/21/19 16:25	1
Toluene-d8 (Surr)	93		75 - 124	11/15/19 19:14	11/21/19 16:25	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.076	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
1,3-Dichlorobenzene	<0.17		0.17	0.038	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 93.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
N-Nitrosodi-n-propylamine	<0.069		0.069	0.042	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4-Chloroaniline	<0.69		0.69	0.16	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2-Methylnaphthalene	<0.069		0.069	0.0063	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2-Nitrophenol	<0.34		0.34	0.080	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,4-Dinitrophenol	<0.69 *		0.69	0.60	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.27	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Phenanthrene	<0.034		0.034	0.0047	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Fluoranthene	<0.034		0.034	0.0063	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Pyrene	<0.034		0.034	0.0068	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Benzof[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 93.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.034		0.034	0.0093	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Benzo[b]fluoranthene	<0.034		0.034	0.0073	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Benzo[a]pyrene	<0.034		0.034	0.0066	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0088	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0066	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	11/25/19 07:37	11/27/19 14:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166				11/25/19 07:37	11/27/19 14:14	1
Phenol-d5	67		30 - 153				11/25/19 07:37	11/27/19 14:14	1
Nitrobenzene-d5	76		37 - 147				11/25/19 07:37	11/27/19 14:14	1
2-Fluorobiphenyl	89		43 - 145				11/25/19 07:37	11/27/19 14:14	1
2,4,6-Tribromophenol	74		31 - 143				11/25/19 07:37	11/27/19 14:14	1
Terphenyl-d14	105		42 - 157				11/25/19 07:37	11/27/19 14:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J B	1.0	0.20	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Arsenic	0.36	J	0.52	0.18	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Barium	1.6		0.52	0.059	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Beryllium	0.080	J	0.21	0.049	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Boron	7.6		2.6	0.24	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Cadmium	0.11	B	0.10	0.019	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Calcium	230000	B	100	18	mg/Kg	☼	11/26/19 18:00	11/29/19 12:22	10
Chromium	1.1	B	0.52	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Cobalt	0.62		0.26	0.068	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Copper	<0.52		0.52	0.15	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Iron	990		10	5.4	mg/Kg	☼	11/26/19 18:00	11/29/19 12:09	1
Lead	1.1		0.26	0.12	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Magnesium	140000	^	52	26	mg/Kg	☼	11/26/19 18:00	11/29/19 12:22	10
Manganese	96		0.52	0.076	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Nickel	0.18	J	0.52	0.15	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Potassium	170		26	9.2	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Selenium	0.38	J	0.52	0.31	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Silver	0.25	J	0.26	0.067	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Sodium	210	B	52	7.7	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Vanadium	0.65		0.26	0.062	mg/Kg	☼	11/26/19 18:00	11/27/19 13:59	1
Zinc	1.6		1.0	0.46	mg/Kg	☼	11/26/19 18:00	11/29/19 12:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:53	1
Boron	0.063	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:53	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 93.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:53	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:53	1
Cobalt	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:53	1
Iron	0.44		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:53	1
Manganese	0.24		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:53	1
Nickel	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:53	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:53	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:53	1
Zinc	<0.50		0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:53	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016	0.0055	mg/Kg	☼	11/25/19 14:35	11/26/19 09:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			11/21/19 14:21	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Date Collected: 11/15/19 00:10

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 82.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.019	J	0.023	0.010	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Benzene	<0.0023		0.0023	0.00060	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Bromodichloromethane	<0.0023		0.0023	0.00048	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Bromoform	<0.0023		0.0023	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Bromomethane	<0.0059		0.0059	0.0022	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
2-Butanone (MEK)	<0.0059		0.0059	0.0026	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Carbon disulfide	<0.0059		0.0059	0.0012	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Carbon tetrachloride	<0.0023		0.0023	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Chlorobenzene	<0.0023		0.0023	0.00086	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Chloroethane	<0.0059		0.0059	0.0017	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Chloroform	<0.0023		0.0023	0.00081	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Chloromethane	<0.0059		0.0059	0.0024	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00065	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Dibromochloromethane	<0.0023		0.0023	0.00077	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,1-Dichloroethane	<0.0023		0.0023	0.00080	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,2-Dichloroethane	<0.0059		0.0059	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,1-Dichloroethene	<0.0023		0.0023	0.00081	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,2-Dichloropropane	<0.0023		0.0023	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,3-Dichloropropane, Total	<0.0023		0.0023	0.00082	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
2-Hexanone	<0.0059		0.0059	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Methylene Chloride	<0.0059		0.0059	0.0023	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
4-Methyl-2-pentanone (MIBK)	<0.0059		0.0059	0.0017	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00069	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Styrene	<0.0023		0.0023	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,1,2,2-Tetrachloroethane	<0.0023	*	0.0023	0.00075	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Tetrachloroethene	<0.0023		0.0023	0.00080	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Toluene	<0.0023		0.0023	0.00059	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00082	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,1,1-Trichloroethane	<0.0023		0.0023	0.00079	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.0010	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Trichloroethene	<0.0023		0.0023	0.00079	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Vinyl acetate	<0.0059		0.0059	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1
Xylenes, Total	0.00077	J	0.0047	0.00075	mg/Kg	☼	11/15/19 19:14	11/21/19 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116	*	75 - 131	11/15/19 19:14	11/21/19 16:51	1
Dibromofluoromethane	96		75 - 126	11/15/19 19:14	11/21/19 16:51	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 134	11/15/19 19:14	11/21/19 16:51	1
Toluene-d8 (Surr)	101		75 - 124	11/15/19 19:14	11/21/19 16:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Date Collected: 11/15/19 00:10

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Phenanthrene	0.15		0.039	0.0055	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Anthracene	0.018	J	0.039	0.0066	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Fluoranthene	0.054		0.039	0.0074	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Pyrene	0.065		0.039	0.0079	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Benzo[a]anthracene	0.029	J	0.039	0.0053	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Date Collected: 11/15/19 00:10

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.046		0.039	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/25/19 07:37	11/27/19 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	57		31 - 166				11/25/19 07:37	11/27/19 16:37	1
Phenol-d5	64		30 - 153				11/25/19 07:37	11/27/19 16:37	1
Nitrobenzene-d5	67		37 - 147				11/25/19 07:37	11/27/19 16:37	1
2-Fluorobiphenyl	83		43 - 145				11/25/19 07:37	11/27/19 16:37	1
2,4,6-Tribromophenol	84		31 - 143				11/25/19 07:37	11/27/19 16:37	1
Terphenyl-d14	100		42 - 157				11/25/19 07:37	11/27/19 16:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J B	1.1	0.22	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Arsenic	6.5		0.56	0.19	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Barium	56		0.56	0.064	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Beryllium	0.76		0.22	0.052	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Boron	20		2.8	0.26	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Cadmium	0.096	J B	0.11	0.020	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Calcium	30000	B	11	1.9	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Chromium	20	B	0.56	0.28	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Cobalt	16		0.28	0.073	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Copper	31		0.56	0.16	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Iron	22000		11	5.8	mg/Kg	☼	11/26/19 18:00	11/29/19 12:26	1
Lead	18		0.28	0.13	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Magnesium	18000		5.6	2.8	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Manganese	290		0.56	0.081	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Nickel	46		0.56	0.16	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Potassium	3800		28	9.9	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Selenium	0.74		0.56	0.33	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Silver	3.4		0.28	0.072	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Sodium	2100	B	56	8.3	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Thallium	1.2		0.56	0.28	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Vanadium	22		0.28	0.066	mg/Kg	☼	11/26/19 18:00	11/27/19 14:11	1
Zinc	56		1.1	0.49	mg/Kg	☼	11/26/19 18:00	11/29/19 12:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.77		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:58	1
Boron	0.11	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Date Collected: 11/15/19 00:10

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 82.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:58	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:58	1
Cobalt	0.035		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:58	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:58	1
Manganese	2.2		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:58	1
Nickel	0.078		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:58	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:58	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:58	1
Zinc	0.037	J	0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.3		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 05:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.018	0.0059	mg/Kg	☼	11/25/19 14:35	11/26/19 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			11/21/19 14:24	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Date Collected: 11/15/19 00:15

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 95.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.017	J	0.021	0.0090	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1
Xylenes, Total	0.00071	J	0.0041	0.00066	mg/Kg	☼	11/15/19 19:14	11/21/19 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 131	11/15/19 19:14	11/21/19 17:17	1
Dibromofluoromethane	92		75 - 126	11/15/19 19:14	11/21/19 17:17	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/15/19 19:14	11/21/19 17:17	1
Toluene-d8 (Surr)	94		75 - 124	11/15/19 19:14	11/21/19 17:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Date Collected: 11/15/19 00:15

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 95.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Isophorone	<0.17		0.17	0.037	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Naphthalene	0.030	J	0.033	0.0051	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2-Methylnaphthalene	0.14		0.067	0.0061	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,4-Dinitrophenol	<0.67	*	0.67	0.59	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Acenaphthene	0.035		0.033	0.0060	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Fluorene	0.039		0.033	0.0047	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Phenanthrene	0.31		0.033	0.0046	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Anthracene	0.045		0.033	0.0056	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Carbazole	<0.17		0.17	0.083	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Fluoranthene	0.36		0.033	0.0062	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Pyrene	0.68		0.033	0.0066	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Benzo[a]anthracene	0.15		0.033	0.0045	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Date Collected: 11/15/19 00:15

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 95.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.24		0.033	0.0091	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Bis(2-ethylhexyl) phthalate	0.11	J	0.17	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Benzo[b]fluoranthene	0.25		0.033	0.0072	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Benzo[k]fluoranthene	0.19		0.033	0.0098	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Benzo[a]pyrene	0.17		0.033	0.0064	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Indeno[1,2,3-cd]pyrene	0.10		0.033	0.0086	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Dibenz(a,h)anthracene	0.021	J	0.033	0.0064	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Benzo[g,h,i]perylene	0.042		0.033	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	11/25/19 07:37	11/27/19 20:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	57		31 - 166				11/25/19 07:37	11/27/19 20:35	1
Phenol-d5	64		30 - 153				11/25/19 07:37	11/27/19 20:35	1
Nitrobenzene-d5	69		37 - 147				11/25/19 07:37	11/27/19 20:35	1
2-Fluorobiphenyl	92		43 - 145				11/25/19 07:37	11/27/19 20:35	1
2,4,6-Tribromophenol	91		31 - 143				11/25/19 07:37	11/27/19 20:35	1
Terphenyl-d14	162	X	42 - 157				11/25/19 07:37	11/27/19 20:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J B	0.97	0.19	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Arsenic	0.79		0.49	0.17	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Barium	6.4		0.49	0.055	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Beryllium	0.18	J	0.19	0.045	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Boron	16		2.4	0.23	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Cadmium	0.13	B	0.097	0.017	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Calcium	190000	B	97	16	mg/Kg	☼	11/26/19 18:00	11/29/19 12:35	10
Chromium	6.2	B	0.49	0.24	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Cobalt	1.2		0.24	0.064	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Copper	2.6		0.49	0.14	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Iron	2500		9.7	5.0	mg/Kg	☼	11/26/19 18:00	11/29/19 12:31	1
Lead	4.5		0.24	0.11	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Magnesium	120000	^	49	24	mg/Kg	☼	11/26/19 18:00	11/29/19 12:35	10
Manganese	200		0.49	0.070	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Nickel	3.9		0.49	0.14	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Potassium	640		24	8.6	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Selenium	0.42	J	0.49	0.29	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Silver	1.4		0.24	0.063	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Sodium	270	B	49	7.2	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Thallium	<0.49		0.49	0.24	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Vanadium	9.0		0.24	0.057	mg/Kg	☼	11/26/19 18:00	11/27/19 14:15	1
Zinc	13		0.97	0.43	mg/Kg	☼	11/26/19 18:00	11/29/19 12:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.061	J	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 10:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 10:02	1
Boron	0.090	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 10:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Date Collected: 11/15/19 00:15

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 95.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 10:02	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:02	1
Cobalt	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:02	1
Iron	1.5		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 10:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 10:02	1
Manganese	1.0		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:02	1
Nickel	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:02	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 10:02	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:02	1
Zinc	<0.50		0.50	0.020	mg/L		11/21/19 15:37	11/22/19 10:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 05:06	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:40	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg	☼	11/25/19 14:35	11/26/19 09:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.2	0.2	SU			11/21/19 14:28	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1
Xylenes, Total	<0.0037		0.0037	0.00058	mg/Kg	☼	11/15/19 19:14	11/21/19 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		75 - 131	11/15/19 19:14	11/21/19 17:43	1
Dibromofluoromethane	93		75 - 126	11/15/19 19:14	11/21/19 17:43	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	11/15/19 19:14	11/21/19 17:43	1
Toluene-d8 (Surr)	98		75 - 124	11/15/19 19:14	11/21/19 17:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Phenanthrene	0.18		0.040	0.0056	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Fluoranthene	0.019	J	0.040	0.0075	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Pyrene	0.034	J	0.040	0.0080	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Benzo[a]anthracene	0.0087	J	0.040	0.0054	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.041		0.040	0.011	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/25/19 07:37	11/27/19 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				11/25/19 07:37	11/27/19 17:01	1
Phenol-d5	74		30 - 153				11/25/19 07:37	11/27/19 17:01	1
Nitrobenzene-d5	78		37 - 147				11/25/19 07:37	11/27/19 17:01	1
2-Fluorobiphenyl	98		43 - 145				11/25/19 07:37	11/27/19 17:01	1
2,4,6-Tribromophenol	81		31 - 143				11/25/19 07:37	11/27/19 17:01	1
Terphenyl-d14	105		42 - 157				11/25/19 07:37	11/27/19 17:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J B	1.2	0.24	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Arsenic	5.8		0.62	0.21	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Barium	68		0.62	0.070	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Beryllium	0.82		0.25	0.058	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Boron	20		3.1	0.29	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Cadmium	0.12	B	0.12	0.022	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Calcium	33000	B	12	2.1	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Chromium	22	B	0.62	0.31	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Cobalt	17		0.31	0.081	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Copper	29		0.62	0.17	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Iron	22000		12	6.4	mg/Kg	☼	11/26/19 18:00	11/29/19 12:39	1
Lead	14		0.31	0.14	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Magnesium	20000		6.2	3.1	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Manganese	300		0.62	0.090	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Nickel	47		0.62	0.18	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Potassium	3800		31	11	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Selenium	0.88		0.62	0.36	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Silver	3.6		0.31	0.080	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Sodium	2500	B	62	9.1	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Thallium	1.3		0.62	0.31	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Vanadium	24		0.31	0.073	mg/Kg	☼	11/26/19 18:00	11/27/19 14:19	1
Zinc	55		1.2	0.54	mg/Kg	☼	11/26/19 18:00	11/29/19 12:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 10:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 10:15	1
Boron	0.12	J B	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 10:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 10:15	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:15	1
Cobalt	0.057		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:15	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 10:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 10:15	1
Manganese	2.5		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:15	1
Nickel	0.14		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:15	1
Selenium	0.021	J	0.050	0.020	mg/L		11/21/19 15:37	11/22/19 10:15	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 10:15	1
Zinc	0.029	J	0.50	0.020	mg/L		11/21/19 15:37	11/22/19 10:15	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.43		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 05:11	1
Nickel	0.091		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 05:11	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:41	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.019	0.0065	mg/Kg	☼	11/25/19 14:35	11/26/19 09:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			11/21/19 14:31	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

GC/MS VOA

Prep Batch: 515833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	5035	
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	5035	
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	5035	
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	5035	
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	5035	
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	5035	
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	5035	
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	5035	
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	5035	

Analysis Batch: 516535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	8260B	515833
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	8260B	515833
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	8260B	515833
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	8260B	515833
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	8260B	515833
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	8260B	515833
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	8260B	515833
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	8260B	515833
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	8260B	515833
MB 500-516535/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-516535/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-516535/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 517113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	3541	
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	3541	
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	3541	
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	3541	
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	3541	
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	3541	
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	3541	
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	3541	
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	3541	
MB 500-517113/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-517113/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-173576-1 MS	2615V2-01-B47 (0-5)	Total/NA	Solid	3541	
500-173576-1 MSD	2615V2-01-B47 (0-5)	Total/NA	Solid	3541	

Analysis Batch: 517122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-517113/1-A	Method Blank	Total/NA	Solid	8270D	517113
LCS 500-517113/2-A	Lab Control Sample	Total/NA	Solid	8270D	517113

Analysis Batch: 517584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	8270D	517113

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

GC/MS Semi VOA (Continued)

Analysis Batch: 517584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	8270D	517113
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	8270D	517113
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	8270D	517113
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	8270D	517113
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	8270D	517113
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	8270D	517113
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	8270D	517113
500-173576-1 MS	2615V2-01-B47 (0-5)	Total/NA	Solid	8270D	517113
500-173576-1 MSD	2615V2-01-B47 (0-5)	Total/NA	Solid	8270D	517113

Analysis Batch: 517884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	8270D	517113

Metals

Leach Batch: 516430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	SPLP East	Solid	1312	
500-173576-2	2615V2-01-B47 (5-10)	SPLP East	Solid	1312	
500-173576-3	2615V2-01-B47 (10-15)	SPLP East	Solid	1312	
500-173576-4	2615V2-01-B56 (0-5)	SPLP East	Solid	1312	
500-173576-5	2615V2-01-B60 (0-5)	SPLP East	Solid	1312	
500-173576-6	2615V2-01-B60 (5-11)	SPLP East	Solid	1312	
500-173576-7	2615V2-01-B61 (0-5)	SPLP East	Solid	1312	
500-173576-8	2615V2-01-B62 (0-5)	SPLP East	Solid	1312	
500-173576-9	2615V2-01-B63 (0-5)	SPLP East	Solid	1312	
LB 500-516430/1-B	Method Blank	SPLP East	Solid	1312	

Leach Batch: 516431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	TCLP	Solid	1311	
500-173576-2	2615V2-01-B47 (5-10)	TCLP	Solid	1311	
500-173576-3	2615V2-01-B47 (10-15)	TCLP	Solid	1311	
500-173576-4	2615V2-01-B56 (0-5)	TCLP	Solid	1311	
500-173576-5	2615V2-01-B60 (0-5)	TCLP	Solid	1311	
500-173576-6	2615V2-01-B60 (5-11)	TCLP	Solid	1311	
500-173576-7	2615V2-01-B61 (0-5)	TCLP	Solid	1311	
500-173576-8	2615V2-01-B62 (0-5)	TCLP	Solid	1311	
500-173576-9	2615V2-01-B63 (0-5)	TCLP	Solid	1311	
LB 500-516431/1-B	Method Blank	TCLP	Solid	1311	
LB 500-516431/1-C	Method Blank	TCLP	Solid	1311	
500-173576-9 MS	2615V2-01-B63 (0-5)	TCLP	Solid	1311	
500-173576-9 DU	2615V2-01-B63 (0-5)	TCLP	Solid	1311	

Prep Batch: 516697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	SPLP East	Solid	3010A	516430
500-173576-2	2615V2-01-B47 (5-10)	SPLP East	Solid	3010A	516430
500-173576-3	2615V2-01-B47 (10-15)	SPLP East	Solid	3010A	516430
500-173576-4	2615V2-01-B56 (0-5)	SPLP East	Solid	3010A	516430

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Metals (Continued)

Prep Batch: 516697 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-5	2615V2-01-B60 (0-5)	SPLP East	Solid	3010A	516430
500-173576-6	2615V2-01-B60 (5-11)	SPLP East	Solid	3010A	516430
500-173576-7	2615V2-01-B61 (0-5)	SPLP East	Solid	3010A	516430
500-173576-8	2615V2-01-B62 (0-5)	SPLP East	Solid	3010A	516430
500-173576-9	2615V2-01-B63 (0-5)	SPLP East	Solid	3010A	516430
LB 500-516430/1-B	Method Blank	SPLP East	Solid	3010A	516430
LCS 500-516697/4-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 516698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	TCLP	Solid	3010A	516431
500-173576-2	2615V2-01-B47 (5-10)	TCLP	Solid	3010A	516431
500-173576-3	2615V2-01-B47 (10-15)	TCLP	Solid	3010A	516431
500-173576-4	2615V2-01-B56 (0-5)	TCLP	Solid	3010A	516431
500-173576-5	2615V2-01-B60 (0-5)	TCLP	Solid	3010A	516431
500-173576-6	2615V2-01-B60 (5-11)	TCLP	Solid	3010A	516431
500-173576-7	2615V2-01-B61 (0-5)	TCLP	Solid	3010A	516431
500-173576-8	2615V2-01-B62 (0-5)	TCLP	Solid	3010A	516431
500-173576-9	2615V2-01-B63 (0-5)	TCLP	Solid	3010A	516431
LB 500-516431/1-B	Method Blank	TCLP	Solid	3010A	516431
LCS 500-516698/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 516835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	TCLP	Solid	7470A	516431
500-173576-2	2615V2-01-B47 (5-10)	TCLP	Solid	7470A	516431
500-173576-3	2615V2-01-B47 (10-15)	TCLP	Solid	7470A	516431
500-173576-4	2615V2-01-B56 (0-5)	TCLP	Solid	7470A	516431
500-173576-5	2615V2-01-B60 (0-5)	TCLP	Solid	7470A	516431
500-173576-6	2615V2-01-B60 (5-11)	TCLP	Solid	7470A	516431
500-173576-7	2615V2-01-B61 (0-5)	TCLP	Solid	7470A	516431
500-173576-8	2615V2-01-B62 (0-5)	TCLP	Solid	7470A	516431
500-173576-9	2615V2-01-B63 (0-5)	TCLP	Solid	7470A	516431
LB 500-516431/1-C	Method Blank	TCLP	Solid	7470A	516431
MB 500-516835/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-516835/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-173576-9 MS	2615V2-01-B63 (0-5)	TCLP	Solid	7470A	516431
500-173576-9 DU	2615V2-01-B63 (0-5)	TCLP	Solid	7470A	516431

Analysis Batch: 516998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	TCLP	Solid	6020A	516698
500-173576-2	2615V2-01-B47 (5-10)	TCLP	Solid	6020A	516698
500-173576-3	2615V2-01-B47 (10-15)	TCLP	Solid	6020A	516698
500-173576-4	2615V2-01-B56 (0-5)	TCLP	Solid	6020A	516698
500-173576-5	2615V2-01-B60 (0-5)	TCLP	Solid	6020A	516698
500-173576-6	2615V2-01-B60 (5-11)	TCLP	Solid	6020A	516698
500-173576-7	2615V2-01-B61 (0-5)	TCLP	Solid	6020A	516698
500-173576-8	2615V2-01-B62 (0-5)	TCLP	Solid	6020A	516698
500-173576-9	2615V2-01-B63 (0-5)	TCLP	Solid	6020A	516698
LB 500-516431/1-B	Method Blank	TCLP	Solid	6020A	516698

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Metals (Continued)

Analysis Batch: 516998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-516698/2-A	Lab Control Sample	Total/NA	Solid	6020A	516698

Analysis Batch: 517105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	TCLP	Solid	6010B	516698
500-173576-2	2615V2-01-B47 (5-10)	TCLP	Solid	6010B	516698
500-173576-3	2615V2-01-B47 (10-15)	TCLP	Solid	6010B	516698
500-173576-4	2615V2-01-B56 (0-5)	TCLP	Solid	6010B	516698
500-173576-5	2615V2-01-B60 (0-5)	TCLP	Solid	6010B	516698
500-173576-6	2615V2-01-B60 (5-11)	TCLP	Solid	6010B	516698
500-173576-7	2615V2-01-B61 (0-5)	TCLP	Solid	6010B	516698
500-173576-8	2615V2-01-B62 (0-5)	TCLP	Solid	6010B	516698
500-173576-9	2615V2-01-B63 (0-5)	TCLP	Solid	6010B	516698
LB 500-516431/1-B	Method Blank	TCLP	Solid	6010B	516698
LCS 500-516698/2-A	Lab Control Sample	Total/NA	Solid	6010B	516698

Prep Batch: 517197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	7471B	
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	7471B	
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	7471B	
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	7471B	
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	7471B	
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	7471B	
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	7471B	
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	7471B	
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	7471B	
MB 500-517197/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-517197/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 517203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	TCLP	Solid	7470A	516835
500-173576-2	2615V2-01-B47 (5-10)	TCLP	Solid	7470A	516835
500-173576-3	2615V2-01-B47 (10-15)	TCLP	Solid	7470A	516835
500-173576-4	2615V2-01-B56 (0-5)	TCLP	Solid	7470A	516835
500-173576-5	2615V2-01-B60 (0-5)	TCLP	Solid	7470A	516835
500-173576-6	2615V2-01-B60 (5-11)	TCLP	Solid	7470A	516835
500-173576-7	2615V2-01-B61 (0-5)	TCLP	Solid	7470A	516835
500-173576-8	2615V2-01-B62 (0-5)	TCLP	Solid	7470A	516835
500-173576-9	2615V2-01-B63 (0-5)	TCLP	Solid	7470A	516835
LB 500-516431/1-C	Method Blank	TCLP	Solid	7470A	516835
MB 500-516835/12-A	Method Blank	Total/NA	Solid	7470A	516835
LCS 500-516835/13-A	Lab Control Sample	Total/NA	Solid	7470A	516835
500-173576-9 MS	2615V2-01-B63 (0-5)	TCLP	Solid	7470A	516835
500-173576-9 DU	2615V2-01-B63 (0-5)	TCLP	Solid	7470A	516835

Analysis Batch: 517288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	SPLP East	Solid	6010B	516697
500-173576-2	2615V2-01-B47 (5-10)	SPLP East	Solid	6010B	516697

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Metals (Continued)

Analysis Batch: 517288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-3	2615V2-01-B47 (10-15)	SPLP East	Solid	6010B	516697
500-173576-4	2615V2-01-B56 (0-5)	SPLP East	Solid	6010B	516697
500-173576-5	2615V2-01-B60 (0-5)	SPLP East	Solid	6010B	516697
500-173576-6	2615V2-01-B60 (5-11)	SPLP East	Solid	6010B	516697
500-173576-7	2615V2-01-B61 (0-5)	SPLP East	Solid	6010B	516697
500-173576-8	2615V2-01-B62 (0-5)	SPLP East	Solid	6010B	516697
500-173576-9	2615V2-01-B63 (0-5)	SPLP East	Solid	6010B	516697
LB 500-516430/1-B	Method Blank	SPLP East	Solid	6010B	516697
LCS 500-516697/4-A	Lab Control Sample	Total/NA	Solid	6010B	516697

Analysis Batch: 517403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	7471B	517197
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	7471B	517197
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	7471B	517197
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	7471B	517197
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	7471B	517197
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	7471B	517197
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	7471B	517197
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	7471B	517197
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	7471B	517197
MB 500-517197/12-A	Method Blank	Total/NA	Solid	7471B	517197
LCS 500-517197/13-A	Lab Control Sample	Total/NA	Solid	7471B	517197

Prep Batch: 517488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	3050B	
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	3050B	
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	3050B	
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	3050B	
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	3050B	
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	3050B	
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	3050B	
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	3050B	
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	3050B	
MB 500-517488/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-517488/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 517761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	6010B	517488
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	6010B	517488
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	6010B	517488
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	6010B	517488
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	6010B	517488
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	6010B	517488
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	6010B	517488
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	6010B	517488
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	6010B	517488
MB 500-517488/1-A	Method Blank	Total/NA	Solid	6010B	517488
LCS 500-517488/2-A	Lab Control Sample	Total/NA	Solid	6010B	517488

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Metals

Analysis Batch: 517892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	6010B	517488
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	6010B	517488
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	6010B	517488
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	6010B	517488
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	6010B	517488
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	6010B	517488
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	6010B	517488
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	6010B	517488
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	6010B	517488
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	6010B	517488
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	6010B	517488
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	6010B	517488
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	6010B	517488
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	6010B	517488
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	6010B	517488
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	6010B	517488
MB 500-517488/1-A	Method Blank	Total/NA	Solid	6010B	517488
LCS 500-517488/2-A	Lab Control Sample	Total/NA	Solid	6010B	517488

General Chemistry

Analysis Batch: 516425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	Moisture	
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	Moisture	
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	Moisture	
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	Moisture	
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	Moisture	
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	Moisture	
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	Moisture	
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	Moisture	
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	Moisture	
500-173576-4 DU	2615V2-01-B56 (0-5)	Total/NA	Solid	Moisture	

Analysis Batch: 516603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173576-1	2615V2-01-B47 (0-5)	Total/NA	Solid	9045D	
500-173576-2	2615V2-01-B47 (5-10)	Total/NA	Solid	9045D	
500-173576-3	2615V2-01-B47 (10-15)	Total/NA	Solid	9045D	
500-173576-4	2615V2-01-B56 (0-5)	Total/NA	Solid	9045D	
500-173576-5	2615V2-01-B60 (0-5)	Total/NA	Solid	9045D	
500-173576-6	2615V2-01-B60 (5-11)	Total/NA	Solid	9045D	
500-173576-7	2615V2-01-B61 (0-5)	Total/NA	Solid	9045D	
500-173576-8	2615V2-01-B62 (0-5)	Total/NA	Solid	9045D	
500-173576-9	2615V2-01-B63 (0-5)	Total/NA	Solid	9045D	
LCS 500-516603/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-516603/6	Lab Control Sample Dup	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(75-131)	(75-126)	(70-134)	(75-124)
500-173576-1	2615V2-01-B47 (0-5)	125	97	101	100
500-173576-2	2615V2-01-B47 (5-10)	103	95	97	96
500-173576-3	2615V2-01-B47 (10-15)	102	93	97	94
500-173576-4	2615V2-01-B56 (0-5)	96	91	95	92
500-173576-5	2615V2-01-B60 (0-5)	96	91	92	93
500-173576-6	2615V2-01-B60 (5-11)	98	89	94	93
500-173576-7	2615V2-01-B61 (0-5)	116 *	96	104	101
500-173576-8	2615V2-01-B62 (0-5)	97	92	94	94
500-173576-9	2615V2-01-B63 (0-5)	110	93	98	98
LCS 500-516535/4	Lab Control Sample	94	90	90	95
LCSD 500-516535/5	Lab Control Sample Dup	93	89	90	95
MB 500-516535/7	Method Blank	98	89	92	92

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPHL
		(31-166)	(30-153)	(37-147)	(43-145)	(31-143)	(42-157)
500-173576-1	2615V2-01-B47 (0-5)	70	78	86	104	83	107
500-173576-1 MS	2615V2-01-B47 (0-5)	69	79	79	97	93	96
500-173576-1 MSD	2615V2-01-B47 (0-5)	66	75	76	94	85	94
500-173576-2	2615V2-01-B47 (5-10)	66	73	79	97	84	109
500-173576-3	2615V2-01-B47 (10-15)	66	72	76	95	78	108
500-173576-4	2615V2-01-B56 (0-5)	66	66	81	93	75	108
500-173576-5	2615V2-01-B60 (0-5)	89	125	147	93	77	151
500-173576-6	2615V2-01-B60 (5-11)	64	67	76	89	74	105
500-173576-7	2615V2-01-B61 (0-5)	57	64	67	83	84	100
500-173576-8	2615V2-01-B62 (0-5)	57	64	69	92	91	162 X
500-173576-9	2615V2-01-B63 (0-5)	67	74	78	98	81	105
LCS 500-517113/2-A	Lab Control Sample	108	100	82	86	76	85
MB 500-517113/1-A	Method Blank	124	105	88	93	59	98

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516535/7
Matrix: Solid
Analysis Batch: 516535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			11/21/19 11:16	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/21/19 11:16	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/21/19 11:16	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/21/19 11:16	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/21/19 11:16	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/21/19 11:16	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/21/19 11:16	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/21/19 11:16	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/21/19 11:16	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/21/19 11:16	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:16	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/21/19 11:16	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/21/19 11:16	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/21/19 11:16	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/21/19 11:16	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:16	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/21/19 11:16	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/21/19 11:16	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/21/19 11:16	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/21/19 11:16	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/21/19 11:16	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/21/19 11:16	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/21/19 11:16	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/21/19 11:16	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/21/19 11:16	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/21/19 11:16	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/21/19 11:16	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/21/19 11:16	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/21/19 11:16	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/21/19 11:16	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/21/19 11:16	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/21/19 11:16	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/21/19 11:16	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/21/19 11:16	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/21/19 11:16	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/21/19 11:16	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/21/19 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131		11/21/19 11:16	1
Dibromofluoromethane	89		75 - 126		11/21/19 11:16	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 134		11/21/19 11:16	1
Toluene-d8 (Surr)	92		75 - 124		11/21/19 11:16	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516535/4
Matrix: Solid
Analysis Batch: 516535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0457		mg/Kg		91	40 - 150
Benzene	0.0500	0.0468		mg/Kg		94	70 - 125
Bromodichloromethane	0.0500	0.0451		mg/Kg		90	67 - 129
Bromoform	0.0500	0.0415		mg/Kg		83	68 - 136
Bromomethane	0.0500	0.0483		mg/Kg		97	70 - 130
2-Butanone (MEK)	0.0500	0.0390		mg/Kg		78	47 - 138
Carbon disulfide	0.0500	0.0460		mg/Kg		92	70 - 129
Carbon tetrachloride	0.0500	0.0471		mg/Kg		94	75 - 125
Chlorobenzene	0.0500	0.0475		mg/Kg		95	50 - 150
Chloroethane	0.0500	0.0520		mg/Kg		104	75 - 125
Chloroform	0.0500	0.0458		mg/Kg		92	57 - 135
Chloromethane	0.0500	0.0444		mg/Kg		89	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0460		mg/Kg		92	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0463		mg/Kg		93	70 - 125
Dibromochloromethane	0.0500	0.0439		mg/Kg		88	69 - 125
1,1-Dichloroethane	0.0500	0.0459		mg/Kg		92	70 - 125
1,2-Dichloroethane	0.0500	0.0463		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0500	0.0482		mg/Kg		96	70 - 120
1,2-Dichloropropane	0.0500	0.0457		mg/Kg		91	70 - 125
Ethylbenzene	0.0500	0.0475		mg/Kg		95	61 - 136
2-Hexanone	0.0500	0.0394		mg/Kg		79	48 - 146
Methylene Chloride	0.0500	0.0452		mg/Kg		90	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0375		mg/Kg		75	50 - 148
Methyl tert-butyl ether	0.0500	0.0463		mg/Kg		93	50 - 140
Styrene	0.0500	0.0463		mg/Kg		93	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0448		mg/Kg		90	70 - 122
Tetrachloroethene	0.0500	0.0474		mg/Kg		95	70 - 124
Toluene	0.0500	0.0477		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0451		mg/Kg		90	70 - 125
1,1,1-Trichloroethane	0.0500	0.0476		mg/Kg		95	70 - 128
1,1,2-Trichloroethane	0.0500	0.0451		mg/Kg		90	70 - 125
Trichloroethene	0.0500	0.0467		mg/Kg		93	70 - 125
Vinyl acetate	0.0500	0.0329		mg/Kg		66	40 - 153
Vinyl chloride	0.0500	0.0466		mg/Kg		93	70 - 125
Xylenes, Total	0.100	0.0948		mg/Kg		95	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	90		75 - 126
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-516535/5
Matrix: Solid
Analysis Batch: 516535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0520		mg/Kg		104	40 - 150	13	30
Benzene	0.0500	0.0451		mg/Kg		90	70 - 125	4	30
Bromodichloromethane	0.0500	0.0448		mg/Kg		90	67 - 129	1	30
Bromoform	0.0500	0.0424		mg/Kg		85	68 - 136	2	30
Bromomethane	0.0500	0.0463		mg/Kg		93	70 - 130	4	30
2-Butanone (MEK)	0.0500	0.0439		mg/Kg		88	47 - 138	12	30
Carbon disulfide	0.0500	0.0443		mg/Kg		89	70 - 129	4	30
Carbon tetrachloride	0.0500	0.0463		mg/Kg		93	75 - 125	2	30
Chlorobenzene	0.0500	0.0464		mg/Kg		93	50 - 150	2	30
Chloroethane	0.0500	0.0491		mg/Kg		98	75 - 125	6	30
Chloroform	0.0500	0.0449		mg/Kg		90	57 - 135	2	30
Chloromethane	0.0500	0.0422		mg/Kg		84	70 - 125	5	30
cis-1,2-Dichloroethene	0.0500	0.0455		mg/Kg		91	70 - 125	1	30
cis-1,3-Dichloropropene	0.0500	0.0451		mg/Kg		90	70 - 125	3	30
Dibromochloromethane	0.0500	0.0436		mg/Kg		87	69 - 125	1	30
1,1-Dichloroethane	0.0500	0.0446		mg/Kg		89	70 - 125	3	30
1,2-Dichloroethane	0.0500	0.0464		mg/Kg		93	70 - 130	0	30
1,1-Dichloroethene	0.0500	0.0463		mg/Kg		93	70 - 120	4	30
1,2-Dichloropropane	0.0500	0.0445		mg/Kg		89	70 - 125	3	30
Ethylbenzene	0.0500	0.0458		mg/Kg		92	61 - 136	4	30
2-Hexanone	0.0500	0.0420		mg/Kg		84	48 - 146	6	30
Methylene Chloride	0.0500	0.0446		mg/Kg		89	70 - 126	1	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0401		mg/Kg		80	50 - 148	7	30
Methyl tert-butyl ether	0.0500	0.0470		mg/Kg		94	50 - 140	1	30
Styrene	0.0500	0.0454		mg/Kg		91	70 - 125	2	30
1,1,2,2-Tetrachloroethane	0.0500	0.0446		mg/Kg		89	70 - 122	1	30
Tetrachloroethene	0.0500	0.0458		mg/Kg		92	70 - 124	3	30
Toluene	0.0500	0.0467		mg/Kg		93	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0458		mg/Kg		92	70 - 125	3	30
trans-1,3-Dichloropropene	0.0500	0.0447		mg/Kg		89	70 - 125	1	30
1,1,1-Trichloroethane	0.0500	0.0464		mg/Kg		93	70 - 128	3	30
1,1,2-Trichloroethane	0.0500	0.0466		mg/Kg		93	70 - 125	3	30
Trichloroethene	0.0500	0.0454		mg/Kg		91	70 - 125	3	30
Vinyl acetate	0.0500	0.0319		mg/Kg		64	40 - 153	3	30
Vinyl chloride	0.0500	0.0439		mg/Kg		88	70 - 125	6	30
Xylenes, Total	0.100	0.0924		mg/Kg		92	53 - 147	3	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	89		75 - 126
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-517113/1-A
Matrix: Solid
Analysis Batch: 517122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517113

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/25/19 07:37	11/25/19 17:12	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-517113/1-A
Matrix: Solid
Analysis Batch: 517122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/25/19 07:37	11/25/19 17:12	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/25/19 07:37	11/25/19 17:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	124		31 - 166	11/25/19 07:37	11/25/19 17:12	1
Phenol-d5	105		30 - 153	11/25/19 07:37	11/25/19 17:12	1
Nitrobenzene-d5	88		37 - 147	11/25/19 07:37	11/25/19 17:12	1
2-Fluorobiphenyl	93		43 - 145	11/25/19 07:37	11/25/19 17:12	1
2,4,6-Tribromophenol	59		31 - 143	11/25/19 07:37	11/25/19 17:12	1
Terphenyl-d14	98		42 - 157	11/25/19 07:37	11/25/19 17:12	1

Lab Sample ID: LCS 500-517113/2-A
Matrix: Solid
Analysis Batch: 517122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.47		mg/Kg		110	56 - 122
Bis(2-chloroethyl)ether	1.33	1.19		mg/Kg		89	55 - 111
1,3-Dichlorobenzene	1.33	1.14		mg/Kg		85	65 - 124
1,4-Dichlorobenzene	1.33	1.14		mg/Kg		85	61 - 110
1,2-Dichlorobenzene	1.33	1.16		mg/Kg		87	62 - 110
2-Methylphenol	1.33	1.49		mg/Kg		112	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.63		mg/Kg		123	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.33		mg/Kg		100	56 - 118
Hexachloroethane	1.33	1.06		mg/Kg		79	60 - 114
2-Chlorophenol	1.33	1.25		mg/Kg		93	64 - 110
Nitrobenzene	1.33	1.29		mg/Kg		97	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.27		mg/Kg		95	60 - 112
1,2,4-Trichlorobenzene	1.33	1.14		mg/Kg		86	66 - 117
Isophorone	1.33	1.28		mg/Kg		96	55 - 110
2,4-Dimethylphenol	1.33	1.15		mg/Kg		86	60 - 110
Hexachlorobutadiene	1.33	1.13		mg/Kg		85	56 - 120
Naphthalene	1.33	1.22		mg/Kg		92	63 - 110
2,4-Dichlorophenol	1.33	1.15		mg/Kg		87	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517113/2-A

Matrix: Solid

Analysis Batch: 517122

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 517113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.09		mg/Kg		82	30 - 150
2,4,6-Trichlorophenol	1.33	1.04		mg/Kg		78	57 - 120
2,4,5-Trichlorophenol	1.33	1.03		mg/Kg		77	50 - 120
Hexachlorocyclopentadiene	1.33	<0.67		mg/Kg		11	10 - 133
2-Methylnaphthalene	1.33	1.18		mg/Kg		89	69 - 112
2-Nitroaniline	1.33	1.35		mg/Kg		101	57 - 124
2-Chloronaphthalene	1.33	1.21		mg/Kg		91	69 - 114
4-Chloro-3-methylphenol	1.33	1.18		mg/Kg		88	65 - 122
2,6-Dinitrotoluene	1.33	1.22		mg/Kg		92	70 - 123
2-Nitrophenol	1.33	1.16		mg/Kg		87	60 - 120
3-Nitroaniline	1.33	1.01		mg/Kg		76	40 - 122
Dimethyl phthalate	1.33	1.21		mg/Kg		90	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		3	10 - 100
Acenaphthylene	1.33	1.22		mg/Kg		91	68 - 120
2,4-Dinitrotoluene	1.33	1.24		mg/Kg		93	69 - 124
Acenaphthene	1.33	1.20		mg/Kg		90	65 - 124
Dibenzofuran	1.33	1.22		mg/Kg		92	66 - 115
4-Nitrophenol	2.67	2.20		mg/Kg		82	30 - 122
Fluorene	1.33	1.22		mg/Kg		91	62 - 120
4-Nitroaniline	1.33	1.12		mg/Kg		84	60 - 160
4-Bromophenyl phenyl ether	1.33	1.19		mg/Kg		89	68 - 118
Hexachlorobenzene	1.33	1.20		mg/Kg		90	63 - 124
Diethyl phthalate	1.33	1.23		mg/Kg		93	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.14		mg/Kg		86	62 - 119
Pentachlorophenol	2.67	0.726		mg/Kg		27	13 - 112
N-Nitrosodiphenylamine	1.33	1.27		mg/Kg		96	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.272	J	mg/Kg		10	10 - 110
Phenanthrene	1.33	1.23		mg/Kg		92	62 - 120
Anthracene	1.33	1.25		mg/Kg		94	70 - 114
Carbazole	1.33	1.30		mg/Kg		97	65 - 142
Di-n-butyl phthalate	1.33	1.30		mg/Kg		98	65 - 120
Fluoranthene	1.33	1.21		mg/Kg		91	62 - 120
Pyrene	1.33	1.25		mg/Kg		94	61 - 128
Butyl benzyl phthalate	1.33	1.28		mg/Kg		96	71 - 129
Benzo[a]anthracene	1.33	1.16		mg/Kg		87	67 - 122
Chrysene	1.33	1.16		mg/Kg		87	63 - 120
3,3'-Dichlorobenzidine	1.33	1.07		mg/Kg		80	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.28		mg/Kg		96	72 - 131
Di-n-octyl phthalate	1.33	1.26		mg/Kg		94	68 - 134
Benzo[b]fluoranthene	1.33	1.26		mg/Kg		95	69 - 129
Benzo[k]fluoranthene	1.33	1.24		mg/Kg		93	68 - 127
Benzo[a]pyrene	1.33	1.24		mg/Kg		93	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.00		mg/Kg		75	68 - 130
Dibenz(a,h)anthracene	1.33	1.04		mg/Kg		78	64 - 131
Benzo[g,h,i]perylene	1.33	0.977		mg/Kg		73	72 - 131
3 & 4 Methylphenol	1.33	1.21		mg/Kg		91	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517113/2-A
Matrix: Solid
Analysis Batch: 517122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517113

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	108		31 - 166
Phenol-d5	100		30 - 153
Nitrobenzene-d5	82		37 - 147
2-Fluorobiphenyl	86		43 - 145
2,4,6-Tribromophenol	76		31 - 143
Terphenyl-d14	85		42 - 157

Lab Sample ID: 500-173576-1 MS
Matrix: Solid
Analysis Batch: 517584

Client Sample ID: 2615V2-01-B47 (0-5)
Prep Type: Total/NA
Prep Batch: 517113

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.19		1.54	1.08		mg/Kg	☼	70	56 - 122
Bis(2-chloroethyl)ether	<0.19		1.54	0.998		mg/Kg	☼	65	55 - 111
1,3-Dichlorobenzene	<0.19		1.54	1.21		mg/Kg	☼	79	60 - 110
1,4-Dichlorobenzene	<0.19		1.54	1.27		mg/Kg	☼	83	61 - 110
1,2-Dichlorobenzene	<0.19		1.54	1.27		mg/Kg	☼	82	62 - 110
2-Methylphenol	<0.19		1.54	1.22		mg/Kg	☼	80	60 - 120
2,2'-oxybis[1-chloropropane]	<0.19		1.54	1.08		mg/Kg	☼	70	40 - 124
N-Nitrosodi-n-propylamine	<0.077		1.54	1.19		mg/Kg	☼	78	56 - 118
Hexachloroethane	<0.19		1.54	1.03		mg/Kg	☼	67	60 - 114
2-Chlorophenol	<0.19		1.54	1.32		mg/Kg	☼	86	64 - 110
Nitrobenzene	<0.038		1.54	1.18		mg/Kg	☼	77	60 - 116
Bis(2-chloroethoxy)methane	<0.19		1.54	1.03		mg/Kg	☼	67	60 - 112
1,2,4-Trichlorobenzene	<0.19		1.54	1.34		mg/Kg	☼	87	66 - 117
Isophorone	<0.19		1.54	1.04		mg/Kg	☼	68	55 - 110
2,4-Dimethylphenol	<0.38		1.54	1.19		mg/Kg	☼	78	60 - 110
Hexachlorobutadiene	<0.19		1.54	1.49		mg/Kg	☼	97	56 - 120
Naphthalene	<0.038		1.54	1.31		mg/Kg	☼	86	63 - 110
2,4-Dichlorophenol	<0.38		1.54	1.33		mg/Kg	☼	87	58 - 120
4-Chloroaniline	<0.77		1.54	1.04		mg/Kg	☼	68	30 - 150
2,4,6-Trichlorophenol	<0.38		1.54	1.39		mg/Kg	☼	91	57 - 120
2,4,5-Trichlorophenol	<0.38		1.54	1.39		mg/Kg	☼	91	50 - 120
Hexachlorocyclopentadiene	<0.77	F1	1.54	<0.77	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	<0.077		1.54	1.39		mg/Kg	☼	91	69 - 112
2-Nitroaniline	<0.19		1.54	1.30		mg/Kg	☼	85	57 - 124
2-Chloronaphthalene	<0.19		1.54	1.47		mg/Kg	☼	96	69 - 114
4-Chloro-3-methylphenol	<0.38		1.54	1.29		mg/Kg	☼	84	65 - 122
2,6-Dinitrotoluene	<0.19		1.54	1.68		mg/Kg	☼	110	70 - 123
2-Nitrophenol	<0.38		1.54	1.27		mg/Kg	☼	83	60 - 120
3-Nitroaniline	<0.38		1.54	1.31		mg/Kg	☼	85	40 - 122
Dimethyl phthalate	<0.19		1.54	1.58		mg/Kg	☼	103	69 - 116
2,4-Dinitrophenol	<0.77	* F1	3.07	1.24		mg/Kg	☼	40	10 - 100
Acenaphthylene	<0.038		1.54	1.42		mg/Kg	☼	93	68 - 120
2,4-Dinitrotoluene	<0.19		1.54	1.70		mg/Kg	☼	111	69 - 124
Acenaphthene	<0.038		1.54	1.55		mg/Kg	☼	101	65 - 124
Dibenzofuran	<0.19		1.54	1.56		mg/Kg	☼	102	66 - 115
4-Nitrophenol	<0.77	F2	3.07	1.53		mg/Kg	☼	50	30 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173576-1 MS

Matrix: Solid

Analysis Batch: 517584

Client Sample ID: 2615V2-01-B47 (0-5)

Prep Type: Total/NA

Prep Batch: 517113

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result			Result	Qualifier					
Fluorene	<0.038		1.54	1.60		mg/Kg	☼	104		62 - 120
4-Nitroaniline	<0.38		1.54	1.42		mg/Kg	☼	93		60 - 160
4-Bromophenyl phenyl ether	<0.19		1.54	1.50		mg/Kg	☼	98		68 - 118
Hexachlorobenzene	<0.077		1.54	1.61		mg/Kg	☼	105		63 - 124
Diethyl phthalate	<0.19		1.54	1.83		mg/Kg	☼	119		58 - 120
4-Chlorophenyl phenyl ether	<0.19		1.54	1.56		mg/Kg	☼	101		62 - 119
Pentachlorophenol	<0.77		3.07	1.25		mg/Kg	☼	41		13 - 112
N-Nitrosodiphenylamine	<0.19	F1	1.54	1.81	F1	mg/Kg	☼	118		65 - 112
4,6-Dinitro-2-methylphenol	<0.77	F2	3.07	1.72		mg/Kg	☼	56		10 - 110
Phenanthrene	0.10		1.54	1.70		mg/Kg	☼	104		62 - 120
Anthracene	<0.038		1.54	1.60		mg/Kg	☼	104		70 - 114
Carbazole	<0.19		1.54	1.67		mg/Kg	☼	109		65 - 142
Di-n-butyl phthalate	<0.19		1.54	1.58		mg/Kg	☼	103		65 - 120
Fluoranthene	0.014	J	1.54	1.54		mg/Kg	☼	99		62 - 120
Pyrene	<0.038		1.54	1.50		mg/Kg	☼	98		61 - 128
Butyl benzyl phthalate	<0.19		1.54	1.36		mg/Kg	☼	89		71 - 129
Benzo[a]anthracene	<0.038		1.54	1.49		mg/Kg	☼	97		67 - 122
Chrysene	<0.038		1.54	1.67		mg/Kg	☼	109		63 - 120
3,3'-Dichlorobenzidine	<0.19		1.54	1.07		mg/Kg	☼	70		35 - 128
Bis(2-ethylhexyl) phthalate	<0.19		1.54	1.53		mg/Kg	☼	100		72 - 131
Di-n-octyl phthalate	<0.19		1.54	1.47		mg/Kg	☼	96		68 - 134
Benzo[b]fluoranthene	<0.038		1.54	1.42		mg/Kg	☼	93		69 - 129
Benzo[k]fluoranthene	<0.038		1.54	1.47		mg/Kg	☼	96		68 - 127
Benzo[a]pyrene	<0.038		1.54	1.53		mg/Kg	☼	99		65 - 133
Indeno[1,2,3-cd]pyrene	<0.038		1.54	1.57		mg/Kg	☼	102		68 - 130
Dibenz(a,h)anthracene	<0.038		1.54	1.64		mg/Kg	☼	107		64 - 131
Benzo[g,h,i]perylene	<0.038		1.54	1.59		mg/Kg	☼	104		72 - 131
3 & 4 Methylphenol	<0.19		1.54	1.31		mg/Kg	☼	85		57 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	69		31 - 166
Phenol-d5	79		30 - 153
Nitrobenzene-d5	79		37 - 147
2-Fluorobiphenyl	97		43 - 145
2,4,6-Tribromophenol	93		31 - 143
Terphenyl-d14	96		42 - 157

Lab Sample ID: 500-173576-1 MSD

Matrix: Solid

Analysis Batch: 517584

Client Sample ID: 2615V2-01-B47 (0-5)

Prep Type: Total/NA

Prep Batch: 517113

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result			Result	Qualifier						Limit	
Phenol	<0.19		1.54	1.09		mg/Kg	☼	71		56 - 122	1	30
Bis(2-chloroethyl)ether	<0.19		1.54	1.04		mg/Kg	☼	67		55 - 111	4	30
1,3-Dichlorobenzene	<0.19		1.54	1.28		mg/Kg	☼	83		60 - 110	6	30
1,4-Dichlorobenzene	<0.19		1.54	1.35		mg/Kg	☼	88		61 - 110	6	30
1,2-Dichlorobenzene	<0.19		1.54	1.34		mg/Kg	☼	87		62 - 110	6	30
2-Methylphenol	<0.19		1.54	1.30		mg/Kg	☼	84		60 - 120	6	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173576-1 MSD

Matrix: Solid

Analysis Batch: 517584

Client Sample ID: 2615V2-01-B47 (0-5)

Prep Type: Total/NA

Prep Batch: 517113

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
2,2'-oxybis[1-chloropropane]	<0.19		1.54	1.11		mg/Kg	☼	72	40 - 124	2	30
N-Nitrosodi-n-propylamine	<0.077		1.54	1.24		mg/Kg	☼	81	56 - 118	4	30
Hexachloroethane	<0.19		1.54	1.02		mg/Kg	☼	67	60 - 114	1	30
2-Chlorophenol	<0.19		1.54	1.38		mg/Kg	☼	90	64 - 110	4	30
Nitrobenzene	<0.038		1.54	1.23		mg/Kg	☼	80	60 - 116	4	30
Bis(2-chloroethoxy)methane	<0.19		1.54	1.08		mg/Kg	☼	70	60 - 112	5	30
1,2,4-Trichlorobenzene	<0.19		1.54	1.43		mg/Kg	☼	93	66 - 117	6	30
Isophorone	<0.19		1.54	1.07		mg/Kg	☼	69	55 - 110	3	30
2,4-Dimethylphenol	<0.38		1.54	1.24		mg/Kg	☼	81	60 - 110	4	30
Hexachlorobutadiene	<0.19		1.54	1.59		mg/Kg	☼	104	56 - 120	7	30
Naphthalene	<0.038		1.54	1.38		mg/Kg	☼	90	63 - 110	5	30
2,4-Dichlorophenol	<0.38		1.54	1.36		mg/Kg	☼	88	58 - 120	2	30
4-Chloroaniline	<0.77		1.54	0.991		mg/Kg	☼	64	30 - 150	5	30
2,4,6-Trichlorophenol	<0.38		1.54	1.39		mg/Kg	☼	91	57 - 120	0	30
2,4,5-Trichlorophenol	<0.38		1.54	1.40		mg/Kg	☼	91	50 - 120	1	30
Hexachlorocyclopentadiene	<0.77	F1	1.54	<0.77	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	<0.077		1.54	1.48		mg/Kg	☼	96	69 - 112	6	30
2-Nitroaniline	<0.19		1.54	1.36		mg/Kg	☼	89	57 - 124	4	30
2-Chloronaphthalene	<0.19		1.54	1.56		mg/Kg	☼	101	69 - 114	6	30
4-Chloro-3-methylphenol	<0.38		1.54	1.33		mg/Kg	☼	86	65 - 122	3	30
2,6-Dinitrotoluene	<0.19		1.54	1.73		mg/Kg	☼	113	70 - 123	3	30
2-Nitrophenol	<0.38		1.54	1.32		mg/Kg	☼	86	60 - 120	4	30
3-Nitroaniline	<0.38		1.54	1.23		mg/Kg	☼	80	40 - 122	7	30
Dimethyl phthalate	<0.19		1.54	1.62		mg/Kg	☼	105	69 - 116	3	30
2,4-Dinitrophenol	<0.77	* F1	3.07	<0.77	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.038		1.54	1.49		mg/Kg	☼	97	68 - 120	4	30
2,4-Dinitrotoluene	<0.19		1.54	1.73		mg/Kg	☼	113	69 - 124	2	30
Acenaphthene	<0.038		1.54	1.60		mg/Kg	☼	104	65 - 124	3	30
Dibenzofuran	<0.19		1.54	1.60		mg/Kg	☼	104	66 - 115	3	30
4-Nitrophenol	<0.77	F2	3.07	2.96	F2	mg/Kg	☼	96	30 - 122	64	30
Fluorene	<0.038		1.54	1.64		mg/Kg	☼	107	62 - 120	3	30
4-Nitroaniline	<0.38		1.54	1.40		mg/Kg	☼	91	60 - 160	2	30
4-Bromophenyl phenyl ether	<0.19		1.54	1.56		mg/Kg	☼	102	68 - 118	4	30
Hexachlorobenzene	<0.077		1.54	1.63		mg/Kg	☼	106	63 - 124	1	30
Diethyl phthalate	<0.19		1.54	1.85		mg/Kg	☼	120	58 - 120	1	30
4-Chlorophenyl phenyl ether	<0.19		1.54	1.59		mg/Kg	☼	104	62 - 119	2	30
Pentachlorophenol	<0.77		3.07	0.958		mg/Kg	☼	31	13 - 112	27	30
N-Nitrosodiphenylamine	<0.19	F1	1.54	1.81	F1	mg/Kg	☼	118	65 - 112	0	30
4,6-Dinitro-2-methylphenol	<0.77	F2	3.07	1.11	F2	mg/Kg	☼	36	10 - 110	43	30
Phenanthrene	0.10		1.54	1.66		mg/Kg	☼	101	62 - 120	2	30
Anthracene	<0.038		1.54	1.64		mg/Kg	☼	107	70 - 114	3	30
Carbazole	<0.19		1.54	1.71		mg/Kg	☼	111	65 - 142	2	30
Di-n-butyl phthalate	<0.19		1.54	1.61		mg/Kg	☼	105	65 - 120	2	30
Fluoranthene	0.014	J	1.54	1.53		mg/Kg	☼	99	62 - 120	0	30
Pyrene	<0.038		1.54	1.48		mg/Kg	☼	96	61 - 128	1	30
Butyl benzyl phthalate	<0.19		1.54	1.37		mg/Kg	☼	89	71 - 129	1	30
Benzo[a]anthracene	<0.038		1.54	1.50		mg/Kg	☼	98	67 - 122	0	30
Chrysene	<0.038		1.54	1.60		mg/Kg	☼	104	63 - 120	4	30
3,3'-Dichlorobenzidine	<0.19		1.54	1.03		mg/Kg	☼	67	35 - 128	4	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173576-1 MSD

Matrix: Solid

Analysis Batch: 517584

Client Sample ID: 2615V2-01-B47 (0-5)

Prep Type: Total/NA

Prep Batch: 517113

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bis(2-ethylhexyl) phthalate	<0.19		1.54	1.50		mg/Kg	☼	97	72 - 131	3	30
Di-n-octyl phthalate	<0.19		1.54	1.44		mg/Kg	☼	93	68 - 134	2	30
Benzo[b]fluoranthene	<0.038		1.54	1.53		mg/Kg	☼	99	69 - 129	7	30
Benzo[k]fluoranthene	<0.038		1.54	1.36		mg/Kg	☼	89	68 - 127	7	30
Benzo[a]pyrene	<0.038		1.54	1.52		mg/Kg	☼	99	65 - 133	0	30
Indeno[1,2,3-cd]pyrene	<0.038		1.54	1.48		mg/Kg	☼	96	68 - 130	6	30
Dibenz(a,h)anthracene	<0.038		1.54	1.56		mg/Kg	☼	101	64 - 131	5	30
Benzo[g,h,i]perylene	<0.038		1.54	1.45		mg/Kg	☼	94	72 - 131	10	30
3 & 4 Methylphenol	<0.19		1.54	1.33		mg/Kg	☼	87	57 - 120	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	66		31 - 166
Phenol-d5	75		30 - 153
Nitrobenzene-d5	76		37 - 147
2-Fluorobiphenyl	94		43 - 145
2,4,6-Tribromophenol	85		31 - 143
Terphenyl-d14	94		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-516697/4-A

Matrix: Solid

Analysis Batch: 517288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516697

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Manganese	0.500	0.500		mg/L		100		80 - 120
Nickel	0.500	0.503		mg/L		101		80 - 120

Lab Sample ID: LCS 500-516698/2-A

Matrix: Solid

Analysis Batch: 517105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516698

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Barium	0.500	0.559		mg/L		112		80 - 120
Beryllium	0.0500	0.0558		mg/L		112		80 - 120
Boron	1.00	1.11		mg/L		111		80 - 120
Cadmium	0.0500	0.0552		mg/L		110		80 - 120
Chromium	0.200	0.230		mg/L		115		80 - 120
Cobalt	0.500	0.549		mg/L		110		80 - 120
Iron	1.00	1.14		mg/L		114		80 - 120
Lead	0.100	0.112		mg/L		112		80 - 120
Manganese	0.500	0.573		mg/L		115		80 - 120
Nickel	0.500	0.551		mg/L		110		80 - 120
Selenium	0.100	0.102		mg/L		102		80 - 120
Silver	0.0500	0.0539		mg/L		108		80 - 120
Zinc	0.500	0.541		mg/L		108		80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-517488/1-A
Matrix: Solid
Analysis Batch: 517761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517488

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.499	J	2.0	0.39	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Arsenic	<1.0		1.0	0.34	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Barium	<1.0		1.0	0.11	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Beryllium	<0.40		0.40	0.093	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Boron	<5.0		5.0	0.47	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Cadmium	0.104	J	0.20	0.036	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Calcium	5.85	J	20	3.4	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Chromium	0.857	J	1.0	0.50	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Cobalt	<0.50		0.50	0.13	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Copper	<1.0		1.0	0.28	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Lead	<0.50		0.50	0.23	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Magnesium	<10		10	5.0	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Manganese	<1.0		1.0	0.15	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Nickel	<1.0		1.0	0.29	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Potassium	<50		50	18	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Silver	<0.50		0.50	0.13	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Sodium	48.3	J	100	15	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Thallium	<1.0		1.0	0.50	mg/Kg		11/26/19 18:00	11/27/19 11:26	1
Vanadium	<0.50		0.50	0.12	mg/Kg		11/26/19 18:00	11/27/19 11:26	1

Lab Sample ID: MB 500-517488/1-A
Matrix: Solid
Analysis Batch: 517892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517488

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	<20		20	10	mg/Kg		11/26/19 18:00	11/29/19 09:42	1
Zinc	<2.0		2.0	0.88	mg/Kg		11/26/19 18:00	11/29/19 09:42	1

Lab Sample ID: LCS 500-517488/2-A
Matrix: Solid
Analysis Batch: 517761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	49.4		mg/Kg		99	80 - 120
Arsenic	10.0	9.19		mg/Kg		92	80 - 120
Barium	200	201		mg/Kg		101	80 - 120
Beryllium	5.00	5.01		mg/Kg		100	80 - 120
Boron	100	85.4		mg/Kg		85	80 - 120
Cadmium	5.00	4.64		mg/Kg		93	80 - 120
Calcium	1000	947		mg/Kg		95	80 - 120
Chromium	20.0	20.7		mg/Kg		103	80 - 120
Cobalt	50.0	49.8		mg/Kg		100	80 - 120
Copper	25.0	25.1		mg/Kg		100	80 - 120
Lead	10.0	9.06		mg/Kg		91	80 - 120
Magnesium	1000	947		mg/Kg		95	80 - 120
Manganese	50.0	49.7		mg/Kg		99	80 - 120
Nickel	50.0	49.7		mg/Kg		99	80 - 120
Potassium	1000	929		mg/Kg		93	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-517488/2-A
Matrix: Solid
Analysis Batch: 517761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	10.0	8.86		mg/Kg		89	80 - 120
Silver	5.00	4.51		mg/Kg		90	80 - 120
Sodium	1000	983		mg/Kg		98	80 - 120
Thallium	10.0	8.92		mg/Kg		89	80 - 120
Vanadium	50.0	48.6		mg/Kg		97	80 - 120

Lab Sample ID: LCS 500-517488/2-A
Matrix: Solid
Analysis Batch: 517892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	100	111		mg/Kg		111	80 - 120
Zinc	50.0	47.2		mg/Kg		94	80 - 120

Lab Sample ID: LB 500-516431/1-B
Matrix: Solid
Analysis Batch: 517105

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516698

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/21/19 15:37	11/22/19 09:23	1
Boron	0.0792	J	0.50	0.050	mg/L		11/21/19 15:37	11/22/19 09:23	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/21/19 15:37	11/22/19 09:23	1
Chromium	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:23	1
Cobalt	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:23	1
Iron	<0.40		0.40	0.20	mg/L		11/21/19 15:37	11/22/19 09:23	1
Lead	0.0101		0.0075	0.0075	mg/L		11/21/19 15:37	11/22/19 09:23	1
Manganese	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:23	1
Nickel	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:23	1
Selenium	<0.050		0.050	0.020	mg/L		11/21/19 15:37	11/22/19 09:23	1
Silver	<0.025		0.025	0.010	mg/L		11/21/19 15:37	11/22/19 09:23	1
Zinc	<0.50		0.50	0.020	mg/L		11/21/19 15:37	11/22/19 09:23	1

Lab Sample ID: LB 500-516430/1-B
Matrix: Solid
Analysis Batch: 517288

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 516697

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:21	1
Nickel	<0.025		0.025	0.010	mg/L		11/21/19 15:34	11/26/19 04:21	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-516698/2-A
Matrix: Solid
Analysis Batch: 516998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.469		mg/L		94	80 - 120
Thallium	0.100	0.0990		mg/L		99	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LB 500-516431/1-B
Matrix: Solid
Analysis Batch: 516998

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516698

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/21/19 15:37	11/23/19 12:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/21/19 15:37	11/23/19 12:28	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-516835/12-A
Matrix: Solid
Analysis Batch: 517203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 08:29	1

Lab Sample ID: LCS 500-516835/13-A
Matrix: Solid
Analysis Batch: 517203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00211		mg/L		106	80 - 120

Lab Sample ID: LB 500-516431/1-C
Matrix: Solid
Analysis Batch: 517203

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 516835

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/22/19 09:05	11/25/19 10:25	1

Lab Sample ID: 500-173576-9 MS
Matrix: Solid
Analysis Batch: 517203

Client Sample ID: 2615V2-01-B63 (0-5)
Prep Type: TCLP
Prep Batch: 516835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00108		mg/L		108	75 - 125

Lab Sample ID: 500-173576-9 DU
Matrix: Solid
Analysis Batch: 517203

Client Sample ID: 2615V2-01-B63 (0-5)
Prep Type: TCLP
Prep Batch: 516835

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-517197/12-A
Matrix: Solid
Analysis Batch: 517403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/25/19 14:35	11/26/19 09:05	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 500-517197/13-A
Matrix: Solid
Analysis Batch: 517403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517197
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.163		mg/Kg		98	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Date Collected: 11/14/19 22:40

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 04:30	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:32	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:30	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603	(Start) 11/21/19 14:02 (End) 11/21/19 14:05	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B47 (0-5)

Lab Sample ID: 500-173576-1

Date Collected: 11/14/19 22:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 14:17	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 15:26	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 13:38	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 11:08	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 11:12	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:10	MJG	TAL CHI

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 04:34	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:36	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:31	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:40	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603		SMO	TAL CHI
					(Start)	11/21/19 14:05		
					(End)	11/21/19 14:08		
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B47 (5-10)

Lab Sample ID: 500-173576-2

Date Collected: 11/14/19 22:45

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 14:43	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 15:49	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 13:42	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 11:34	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 11:38	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:12	MJG	TAL CHI

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 04:38	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:41	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:32	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:42	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	516603		SMO	TAL CHI
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B47 (10-15)

Lab Sample ID: 500-173576-3

Date Collected: 11/14/19 22:50

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 15:08	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 16:13	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 13:46	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 11:43	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 11:47	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:18	MJG	TAL CHI

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Date Collected: 11/14/19 23:00

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 04:50	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:45	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:33	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:43	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603		SMO	TAL CHI
					(Start)	11/21/19 14:15		
					(End)	11/21/19 14:18		
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B56 (0-5)

Lab Sample ID: 500-173576-4

Date Collected: 11/14/19 23:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 96.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 15:34	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 13:50	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 13:50	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 11:51	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 11:56	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:20	MJG	TAL CHI

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 04:54	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:49	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:34	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:45	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603	(Start) 11/21/19 14:18 (End) 11/21/19 14:21	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 16:00	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517884	11/29/19 23:37	NRJ	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (0-5)

Lab Sample ID: 500-173576-5

Date Collected: 11/15/19 00:00

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 13:54	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 12:00	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 12:04	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:22	MJG	TAL CHI

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 04:58	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:53	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:37	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:47	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603		SMO	TAL CHI
					(Start)	11/21/19 14:21		
					(End)	11/21/19 14:24		
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 16:25	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 14:14	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 13:59	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 12:09	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B60 (5-11)

Lab Sample ID: 500-173576-6

Date Collected: 11/15/19 00:05

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 12:22	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:25	MJG	TAL CHI

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Date Collected: 11/15/19 00:10

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 05:02	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 09:58	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:38	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:48	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603		SMO	TAL CHI
					(Start)	11/21/19 14:24		
					(End)	11/21/19 14:28		
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B61 (0-5)

Lab Sample ID: 500-173576-7

Date Collected: 11/15/19 00:10

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 16:51	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 16:37	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 14:11	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 12:26	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:27	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Date Collected: 11/15/19 00:15

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 05:06	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 10:02	EEN	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:40	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603	(Start) 11/21/19 14:28 (End) 11/21/19 14:31	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B62 (0-5)

Lab Sample ID: 500-173576-8

Date Collected: 11/15/19 00:15

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 17:17	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 20:35	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 14:15	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 12:31	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	517892	11/29/19 12:35	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:29	MJG	TAL CHI

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516430	11/20/19 12:05	GCA	TAL CHI
SPLP East	Prep	3010A			516697	11/21/19 15:34	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517288	11/26/19 05:11	JEF	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6010B		1	517105	11/22/19 10:15	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	3010A			516698	11/21/19 15:37	BDE	TAL CHI
TCLP	Analysis	6020A		1	516998	11/23/19 12:41	FXG	TAL CHI
TCLP	Leach	1311			516431	11/20/19 12:05	GCA	TAL CHI
TCLP	Prep	7470A			516835	11/22/19 09:05	MJG	TAL CHI
TCLP	Analysis	7470A		1	517203	11/25/19 08:51	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516603		SMO	TAL CHI
					(Start)	11/21/19 14:31		
					(End)	11/21/19 14:34		
Total/NA	Analysis	Moisture		1	516425	11/20/19 12:06	LWN	TAL CHI

Client Sample ID: 2615V2-01-B63 (0-5)

Lab Sample ID: 500-173576-9

Date Collected: 11/15/19 00:40

Matrix: Solid

Date Received: 11/15/19 11:08

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			515833	11/15/19 19:14	WRE	TAL CHI
Total/NA	Analysis	8260B		1	516535	11/21/19 17:43	PMF	TAL CHI
Total/NA	Prep	3541			517113	11/25/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517584	11/27/19 17:01	AJD	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517761	11/27/19 14:19	JEF	TAL CHI
Total/NA	Prep	3050B			517488	11/26/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	517892	11/29/19 12:39	JEF	TAL CHI
Total/NA	Prep	7471B			517197	11/25/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517403	11/26/19 09:31	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173576-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: P. THE BOYT
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____ 500-173576 COC
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173576

Chain of Custody Number: _____

Page 1 of 2

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
E TE		1004341.0447.01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Date		Time		# of Containers		Matrix	
170-001-047E											
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
CHICAGO IL		R. WRIGHT									
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
A. HAPPEL		R. WRIGHT									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
1		2615V2-01-B47(0-5)	11/14/19	2240	2	S	VOCs (876015/8035)				
2		2615V2-01-B47(5-10)	11/14/19	2245	2	S	SVOCs (827-0)				
3		2615V2-01-B47(10-15)	11/14/19	2250	2	S	TOTAL METALS, PH (60103/60704)				
4		2615V2-01-B56(0-5)	11/14/19	2330	2	S	TCLP METALS (1311/6906/6001/40058)				
5		2615V2-01-B60(0-5)	11/15/19	0000	2	S					
6		2615V2-01-B60(5-11)	11/15/19	0005	2	S					
7		2615V2-01-B61(0-5)	11/15/19	0010	2	S					
8		2615V2-01-B62(0-5)	11/15/19	0025	2	S					
9		2615V2-01-B63(0-5)	11/15/19	0040	2	S					

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company <u>EA</u>	Date <u>11/15/19</u>	Time <u>0300</u>	Received By <u>[Signature]</u>	Company <u>EA</u>	Date <u>11/15/19</u>	Time <u>0920</u>
Relinquished By <u>P. Neal</u>	Company <u>EA</u>	Date <u>11/15/19</u>	Time <u>1108</u>	Received By <u>[Signature]</u>	Company <u>EA</u>	Date <u>11-15-19</u>	Time <u>1108</u>

Lab Courier: _____
Shipped: _____
Hand Delivered: _____

Matrix Key

- WW - Wastewater
- W - Water
- S - Soil
- SL - Sludge
- MS - Miscellaneous
- OL - Oil
- A - Air
- SE - Sediment
- SO - Soil
- L - Leachate
- WI - Wipe
- DW - Drinking Water
- O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173576-1

Login Number: 173576

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	6.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173686-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/5/2019 9:59:26 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Job ID: 500-173686-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173686-1

Receipt

The samples were received on 11/19/2019 10:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.5° C and 4.6° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following samples contained one acid surrogate outside acceptance limits: 2615V2-AI-B27 (10-15) (500-173686-14), 2615V2-AI-B26 (5-10) (500-173686-16) and 2615V2-AI-B26 (10-15) (500-173686-17). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-517923 and analytical batch 500-518079 recovered outside control limits for the following analytes: 2,2'-oxybis[1-chloropropane], 2,4-Dinitrophenol, 2-Methylphenol, Isophorone, Nitrobenzene, Phenol and N-Nitrosodi-n-propylamine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-173686-E-1-G MS) and (500-173686-E-1-H MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

Method 6010B: The laboratory control sample (LCS) for preparation batch 500-516882 and 500-517068 and analytical batch 500-517762 recovered outside control limits for the following analytes: iron. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 6010B: The continuing calibration verification (CCV) at line 57 was outside the control limits for zinc bracketing the sample duplicate (DU) and matrix spike (MS). The associated original sample 2615V2-AI-B26 (10-15) (500-173686-17) was bracketed with continuing calibration verifications that were within control limits, therefore the data has been reported.

Method 6010B: The continuing calibration blank (CCB) for 500-518550 contained magnesium above the reporting limit (RL). Associated sample 2615V2-AI-B01 (0-6) (500-173686-1), 2615V2-AI-B01 (6-12) (500-173686-2), 2615V2-AI-B01 (12-18) (500-173686-3), 2615V2-AI-B01 (18-24) (500-173686-4), 2615V2-AI-B01 (24-30) (500-173686-5), 2615V2-AI-B02 (0-6) (500-173686-6), 2615V2-AI-B02 (6-12) (500-173686-7), 2615V2-AI-B02 (12-18) (500-173686-8) and 2615V2-AI-B02 (18-24) (500-173686-9) was not re-analyzed because results were greater than 10X the value found in the CCB.

Method 6010B: The method blank for preparation batch 500-518168 and analytical batch 500-518550 contained magnesium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.11		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J B F1	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.8	F1	0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70	B	0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.069	J F1 B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	17	B F1	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	11	F1	0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	16000	B ^	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	230	B	0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.92	F1 B	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4	B	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400	B F1	59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1	F1	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	F1	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.78		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.063		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.038	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.2		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.19		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.044		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.76	J B	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.86	B	0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	21		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.075	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	34000	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	19	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.4	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (6-12) (Continued)

Lab Sample ID: 500-173686-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000	B ^	6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	42	B	0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.95	B	0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6	B	0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	450	B	62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.21	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.058		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.033		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.021	0.0069	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.054	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.027	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.2		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77	B	0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	23		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.081	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	26000	B	120	62	mg/Kg	10	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B ^	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3900		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.88		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	3.0		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	200	B	60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (12-18) (Continued)

Lab Sample ID: 500-173686-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.028		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.019	0.0064	mg/Kg	1	*	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.010	J	0.018	0.0079	mg/Kg	1	*	8260B	Total/NA
Trichloroethene	0.00072	J	0.0018	0.00061	mg/Kg	1	*	8260B	Total/NA
Xylenes, Total	0.0014	J	0.0036	0.00058	mg/Kg	1	*	8260B	Total/NA
2-Methylnaphthalene	0.047	J	0.083	0.0076	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0057	mg/Kg	1	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.041	0.013	mg/Kg	1	*	8270D	Total/NA
Antimony	0.49	J B	1.2	0.24	mg/Kg	1	*	6010B	Total/NA
Arsenic	7.2		0.62	0.21	mg/Kg	1	*	6010B	Total/NA
Barium	39		0.62	0.071	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.69	B	0.25	0.058	mg/Kg	1	*	6010B	Total/NA
Boron	19		3.1	0.29	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.084	J B	0.12	0.022	mg/Kg	1	*	6010B	Total/NA
Calcium	70000	B	120	21	mg/Kg	10	*	6010B	Total/NA
Chromium	17	B	0.62	0.31	mg/Kg	1	*	6010B	Total/NA
Cobalt	13		0.31	0.082	mg/Kg	1	*	6010B	Total/NA
Copper	25		0.62	0.17	mg/Kg	1	*	6010B	Total/NA
Iron	27000	B	120	65	mg/Kg	10	*	6010B	Total/NA
Lead	13		0.31	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	26000	B ^	6.2	3.1	mg/Kg	1	*	6010B	Total/NA
Manganese	370	B	0.62	0.090	mg/Kg	1	*	6010B	Total/NA
Nickel	35	B	0.62	0.18	mg/Kg	1	*	6010B	Total/NA
Potassium	3200		31	11	mg/Kg	1	*	6010B	Total/NA
Selenium	0.82		0.62	0.37	mg/Kg	1	*	6010B	Total/NA
Silver	2.4		0.31	0.080	mg/Kg	1	*	6010B	Total/NA
Sodium	190	B	62	9.2	mg/Kg	1	*	6010B	Total/NA
Thallium	0.92		0.62	0.31	mg/Kg	1	*	6010B	Total/NA
Vanadium	21		0.31	0.074	mg/Kg	1	*	6010B	Total/NA
Zinc	52		1.2	0.55	mg/Kg	1	*	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.24	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.17	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.043		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0066	mg/Kg	1	*	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.00079	J	0.0018	0.00062	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.0014	J	0.0037	0.00059	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.040	J	0.083	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.097		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.64	J B	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.74	B	0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	22		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	25000	B	120	65	mg/Kg	10	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B ^	6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.94		0.62	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	210	B	62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.34	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.063		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.00079	J	0.0036	0.00057	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.051	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.14		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.032	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.68	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.2		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (0-6) (Continued)

Lab Sample ID: 500-173686-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.90	B	0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	21		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.071	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	20	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	17		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	35		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000	B ^	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	280	B	0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	47	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	4100		30	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.99	B	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6	B	0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200	B	59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.091	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.066		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.028	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0079	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.046	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.58	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.5		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.89	B	0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	21		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	19	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	32		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000	B ^	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	280	B	0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	44	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (6-12) (Continued)

Lab Sample ID: 500-173686-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3900		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.0	B	0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6	B	0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100	B	60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.076		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.073		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.015	J	0.017	0.0073	mg/Kg	1	☼	8260B	Total/NA
Trichloroethene	0.00070	J	0.0017	0.00057	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.0014	J	0.0034	0.00054	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.045	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.099		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.023	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.68	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.2		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75	B	0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.082	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	25000	B	120	62	mg/Kg	10	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B ^	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	36	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.98		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	220	B	60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18) (Continued)

Lab Sample ID: 500-173686-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.24	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.044		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.039	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.033		0.025	0.010	mg/L	1		6010B	SPLP East
Barium	0.80		0.50	0.050	mg/L	1		6010B	TCLP
Mercury	0.021		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
Flashpoint	>176		99.0	99.0	Degrees F	1		1010A	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA
Paint Filter	Pass				No Unit	1		9095A	Total/NA

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.018		0.015	0.0064	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00086	J	0.0030	0.00047	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.047	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.030	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.027	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.62	J B	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73	B	0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	27000	B	120	63	mg/Kg	10	☼	6010B	Total/NA
Lead	22		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B ^	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	38	B	0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.85		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	190	B	61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.69		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.74		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.32	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.037		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.019		0.016	0.0068	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.0015	J	0.0031	0.00050	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.049	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0099	J	0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.72	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75	B	0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.066	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	50000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	23000	B	120	60	mg/Kg	10	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3600		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.1		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	200	B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.22	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.081	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.080		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.00062	J	0.0034	0.00055	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.024	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.088		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.63	J B	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.8		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71	B	0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.099	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (0-5) (Continued)

Lab Sample ID: 500-173686-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	59000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	23000	B	120	60	mg/Kg	10	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	34	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200	B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.98		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.069	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.059		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.027		0.016	0.0070	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00068	J	0.0032	0.00051	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.076	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.018	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.60	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.1		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70	B	0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.081	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	60000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	24000	B	120	62	mg/Kg	10	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000	B	5.9	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	35	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10) (Continued)

Lab Sample ID: 500-173686-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	2.4		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	410	B	59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.32	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.050	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.027		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.00075	J	0.0032	0.00052	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.035	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.47	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.56	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71	B	0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.073	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.56	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	24000	B	110	58	mg/Kg	10	☼	6010B	Total/NA
Lead	15		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	36	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.81		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	630	B	56	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.22	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.034	J B	0.50	0.020	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)D (Continued)

Lab Sample ID: 500-173686-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.027		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0064	mg/Kg	1	*	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.053	J	0.081	0.0074	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.13		0.040	0.0056	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.036	J	0.040	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.74	J B	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	7.3		0.60	0.21	mg/Kg	1	*	6010B	Total/NA
Barium	40		0.60	0.068	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.77	B	0.24	0.056	mg/Kg	1	*	6010B	Total/NA
Boron	20		3.0	0.28	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.17	B	0.12	0.022	mg/Kg	1	*	6010B	Total/NA
Calcium	58000	B	120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	18	B	0.60	0.30	mg/Kg	1	*	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	*	6010B	Total/NA
Copper	28		0.60	0.17	mg/Kg	1	*	6010B	Total/NA
Iron	25000	B	120	62	mg/Kg	10	*	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	23000	B	6.0	3.0	mg/Kg	1	*	6010B	Total/NA
Manganese	310	B	0.60	0.087	mg/Kg	1	*	6010B	Total/NA
Nickel	36	B	0.60	0.17	mg/Kg	1	*	6010B	Total/NA
Potassium	3500		30	11	mg/Kg	1	*	6010B	Total/NA
Selenium	0.91		0.60	0.35	mg/Kg	1	*	6010B	Total/NA
Silver	2.7		0.30	0.077	mg/Kg	1	*	6010B	Total/NA
Sodium	210	B	60	8.9	mg/Kg	1	*	6010B	Total/NA
Thallium	0.90		0.60	0.30	mg/Kg	1	*	6010B	Total/NA
Vanadium	23		0.30	0.071	mg/Kg	1	*	6010B	Total/NA
Zinc	59		1.2	0.53	mg/Kg	1	*	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.31	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.12	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.040		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0064	mg/Kg	1	*	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.017	0.0073	mg/Kg	1	*	8260B	Total/NA
2-Methylnaphthalene	0.014	J	0.080	0.0073	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.051		0.040	0.0055	mg/Kg	1	*	8270D	Total/NA
Antimony	0.40	J B	1.1	0.22	mg/Kg	1	*	6010B	Total/NA
Arsenic	6.2		0.56	0.19	mg/Kg	1	*	6010B	Total/NA
Barium	33		0.56	0.064	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (0-5) (Continued)

Lab Sample ID: 500-173686-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.61	B	0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	110	58	mg/Kg	10	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	32	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.76		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	880	B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.84		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.52		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.076	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0026	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.34	J*	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.067		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.19	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.51		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.031	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.078		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.53	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.7		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68	B	0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.080	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	62000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	23000	B	120	62	mg/Kg	10	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	33	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (5-10) (Continued)

Lab Sample ID: 500-173686-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.73		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	470	B	60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.69		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.23	J*	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.0010	J	0.0030	0.0010	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.027	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.092		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.028	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.57	J B	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.1		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75	B	0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	23000	B	120	60	mg/Kg	10	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	35	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.70		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	190	B	58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.21	J*	0.40	0.20	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (10-15) (Continued)

Lab Sample ID: 500-173686-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.026	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.032		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0064	mg/Kg	1	✳	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173686-1	2615V2-AI-B01 (0-6)	Solid	11/19/19 00:05	11/19/19 10:40	
500-173686-2	2615V2-AI-B01 (6-12)	Solid	11/19/19 00:16	11/19/19 10:40	
500-173686-3	2615V2-AI-B01 (12-18)	Solid	11/19/19 00:26	11/19/19 10:40	
500-173686-4	2615V2-AI-B01 (18-24)	Solid	11/19/19 00:33	11/19/19 10:40	
500-173686-5	2615V2-AI-B01 (24-30)	Solid	11/19/19 00:38	11/19/19 10:40	
500-173686-6	2615V2-AI-B02 (0-6)	Solid	11/19/19 01:34	11/19/19 10:40	
500-173686-7	2615V2-AI-B02 (6-12)	Solid	11/19/19 01:39	11/19/19 10:40	
500-173686-8	2615V2-AI-B02 (12-18)	Solid	11/19/19 01:50	11/19/19 10:40	
500-173686-9	2615V2-AI-B02 (18-24)	Solid	11/19/19 01:55	11/19/19 10:40	
500-173686-10	2615V2-AI-B02 (24-30)	Solid	11/19/19 02:00	11/19/19 10:40	
500-173686-11	2615V2-AI-B27 (0-5)	Solid	11/19/19 03:08	11/19/19 10:40	
500-173686-12	2615V2-AI-B27 (5-10)	Solid	11/19/19 03:19	11/19/19 10:40	
500-173686-13	2615V2-AI-B27 (5-10)D	Solid	11/19/19 03:19	11/19/19 10:40	
500-173686-14	2615V2-AI-B27 (10-15)	Solid	11/19/19 03:25	11/19/19 10:40	
500-173686-15	2615V2-AI-B26 (0-5)	Solid	11/19/19 04:00	11/19/19 10:40	
500-173686-16	2615V2-AI-B26 (5-10)	Solid	11/19/19 04:05	11/19/19 10:40	
500-173686-17	2615V2-AI-B26 (10-15)	Solid	11/19/19 04:15	11/19/19 10:40	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Date Collected: 11/19/19 00:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/19/19 17:20	11/30/19 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	11/19/19 17:20	11/30/19 17:50	1
4-Bromofluorobenzene (Surr)	118		75 - 131	11/19/19 17:20	11/30/19 17:50	1
Dibromofluoromethane	92		75 - 126	11/19/19 17:20	11/30/19 17:50	1
Toluene-d8 (Surr)	98		75 - 124	11/19/19 17:20	11/30/19 17:50	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	F1 *	0.20	0.087	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Bis(2-chloroethyl)ether	<0.20	F1	0.20	0.059	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Date Collected: 11/19/19 00:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2-Methylphenol	<0.20	F1 *	0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,2'-oxybis[1-chloropropane]	<0.20	F1 *	0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
N-Nitrosodi-n-propylamine	<0.079	F1 *	0.079	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Hexachloroethane	<0.20	F1	0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2-Chlorophenol	<0.20	F1	0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Nitrobenzene	<0.039	F1 *	0.039	0.0098	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Bis(2-chloroethoxy)methane	<0.20	F1	0.20	0.040	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Isophorone	<0.20	F1 *	0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Hexachlorocyclopentadiene	<0.79	F1	0.79	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2-Nitroaniline	<0.20	F1	0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,4-Dinitrophenol	<0.79	F1 *	0.79	0.69	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Phenanthrene	0.11		0.039	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Date Collected: 11/19/19 00:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.039	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Indeno[1,2,3-cd]pyrene	<0.039	F1	0.039	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Benzo[g,h,i]perylene	<0.039	F1	0.039	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
3 & 4 Methylphenol	<0.20	F1	0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 02:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	120		31 - 166				11/29/19 16:14	12/03/19 02:09	1
Phenol-d5	115		30 - 153				11/29/19 16:14	12/03/19 02:09	1
Nitrobenzene-d5	94		37 - 147				11/29/19 16:14	12/03/19 02:09	1
2-Fluorobiphenyl	90		43 - 145				11/29/19 16:14	12/03/19 02:09	1
2,4,6-Tribromophenol	69		31 - 143				11/29/19 16:14	12/03/19 02:09	1
Terphenyl-d14	102		42 - 157				11/29/19 16:14	12/03/19 02:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J B F1	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Arsenic	5.8	F1	0.59	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Barium	36		0.59	0.067	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Beryllium	0.70	B	0.23	0.055	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Boron	17		2.9	0.27	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Cadmium	0.069	J F1 B	0.12	0.021	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Calcium	23000	B	12	2.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Chromium	17	B F1	0.59	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Cobalt	13		0.29	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Copper	29		0.59	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Iron	17000	B	12	6.1	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Lead	11	F1	0.29	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Magnesium	16000	B ^	5.9	2.9	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Manganese	230	B	0.59	0.085	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Nickel	37	B	0.59	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Potassium	3400		29	10	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Selenium	0.92	F1 B	0.59	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Silver	2.4	B	0.29	0.076	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Sodium	1400	B F1	59	8.7	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Thallium	1.1	F1	0.59	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1
Zinc	48	F1	1.2	0.52	mg/Kg	☼	12/03/19 09:00	12/03/19 16:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.78		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 19:48	1
Boron	0.11	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Date Collected: 11/19/19 00:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0030	J	0.0050	0.0020	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Cobalt	0.042		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Iron	<0.40	*	0.40	0.20	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Manganese	2.5		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Nickel	0.063		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Silver	<0.025		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 19:48	1
Zinc	0.038	J B	0.50	0.020	mg/L	-	11/24/19 16:18	11/27/19 19:48	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.2		0.025	0.010	mg/L	-	11/24/19 16:14	11/26/19 20:43	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/24/19 16:18	11/27/19 01:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/24/19 16:18	11/27/19 01:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/25/19 10:00	11/26/19 09:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.017	0.0058	mg/Kg	☼	11/26/19 14:35	11/27/19 09:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU	-		11/25/19 08:42	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	11/19/19 17:20	11/30/19 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/19/19 17:20	11/30/19 18:16	1
4-Bromofluorobenzene (Surr)	108		75 - 131	11/19/19 17:20	11/30/19 18:16	1
Dibromofluoromethane	95		75 - 126	11/19/19 17:20	11/30/19 18:16	1
Toluene-d8 (Surr)	96		75 - 124	11/19/19 17:20	11/30/19 18:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2-Methylphenol	<0.21	*	0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
N-Nitrosodi-n-propylamine	<0.084	*	0.084	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Isophorone	<0.21	*	0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,4-Dinitrophenol	<0.84	*	0.84	0.73	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Phenanthrene	0.19		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.044		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 02:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	130		31 - 166				11/29/19 16:14	12/03/19 02:37	1
Phenol-d5	121		30 - 153				11/29/19 16:14	12/03/19 02:37	1
Nitrobenzene-d5	102		37 - 147				11/29/19 16:14	12/03/19 02:37	1
2-Fluorobiphenyl	96		43 - 145				11/29/19 16:14	12/03/19 02:37	1
2,4,6-Tribromophenol	46		31 - 143				11/29/19 16:14	12/03/19 02:37	1
Terphenyl-d14	104		42 - 157				11/29/19 16:14	12/03/19 02:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J B	1.2	0.24	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Arsenic	8.0		0.62	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Barium	38		0.62	0.070	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Beryllium	0.86	B	0.25	0.058	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Boron	21		3.1	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Cadmium	0.075	J B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Calcium	34000	B	12	2.1	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Chromium	19	B	0.62	0.31	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Cobalt	15		0.31	0.081	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Copper	33		0.62	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Iron	20000	B	12	6.4	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Lead	16		0.31	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Magnesium	20000	B ^	6.2	3.1	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Manganese	300	B	0.62	0.090	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Nickel	42	B	0.62	0.18	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Potassium	3800		31	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Selenium	0.95	B	0.62	0.36	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Silver	2.6	B	0.31	0.080	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Sodium	450	B	62	9.1	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Thallium	1.3		0.62	0.31	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Vanadium	23		0.31	0.073	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1
Zinc	55		1.2	0.54	mg/Kg	☼	12/03/19 09:00	12/03/19 16:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 19:52	1
Boron	0.11	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 19:52	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:52	1
Cobalt	0.023	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:52	1
Iron	0.21	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 19:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 19:52	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:52	1
Nickel	0.058		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:52	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 19:52	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:52	1
Zinc	<0.50		0.50	0.020	mg/L		11/24/19 16:18	11/27/19 19:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 20:47	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:10	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.021	0.0069	mg/Kg	☼	11/26/19 14:35	11/27/19 09:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/25/19 08:42	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Date Collected: 11/19/19 00:26

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	11/19/19 17:20	11/30/19 18:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/19/19 17:20	11/30/19 18:42	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/19/19 17:20	11/30/19 18:42	1
Dibromofluoromethane	90		75 - 126	11/19/19 17:20	11/30/19 18:42	1
Toluene-d8 (Surr)	96		75 - 124	11/19/19 17:20	11/30/19 18:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Date Collected: 11/19/19 00:26

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2-Methylphenol	<0.21	*	0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
N-Nitrosodi-n-propylamine	<0.084	*	0.084	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Isophorone	<0.21	*	0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2-Methylnaphthalene	0.054	J	0.084	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,4-Dinitrophenol	<0.84	*	0.84	0.73	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Phenanthrene	0.11		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Pyrene	0.027	J	0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Date Collected: 11/19/19 00:26

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 03:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	120		31 - 166				11/29/19 16:14	12/03/19 03:04	1
Phenol-d5	112		30 - 153				11/29/19 16:14	12/03/19 03:04	1
Nitrobenzene-d5	94		37 - 147				11/29/19 16:14	12/03/19 03:04	1
2-Fluorobiphenyl	91		43 - 145				11/29/19 16:14	12/03/19 03:04	1
2,4,6-Tribromophenol	49		31 - 143				11/29/19 16:14	12/03/19 03:04	1
Terphenyl-d14	95		42 - 157				11/29/19 16:14	12/03/19 03:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Arsenic	7.2		0.60	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Barium	44		0.60	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Beryllium	0.77	B	0.24	0.056	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Boron	23		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Cadmium	0.081	J B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Calcium	55000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 10:29	10
Chromium	19	B	0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Cobalt	14		0.30	0.079	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Copper	27		0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Iron	26000	B	120	62	mg/Kg	☼	12/03/19 09:00	12/04/19 10:29	10
Lead	14		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Magnesium	23000	B ^	6.0	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Manganese	310	B	0.60	0.087	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Nickel	37	B	0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Potassium	3900		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Selenium	0.88		0.60	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Silver	3.0		0.30	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Sodium	200	B	60	8.9	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Thallium	1.1		0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Vanadium	24		0.30	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1
Zinc	53		1.2	0.53	mg/Kg	☼	12/03/19 09:00	12/03/19 16:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.77		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 19:57	1
Boron	0.11	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:57	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Date Collected: 11/19/19 00:26

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 19:57	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:57	1
Cobalt	0.012	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:57	1
Iron	<0.40	*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 19:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 19:57	1
Manganese	1.8		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:57	1
Nickel	0.035		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:57	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 19:57	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:57	1
Zinc	<0.50		0.50	0.020	mg/L		11/24/19 16:18	11/27/19 19:57	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 20:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:12	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0064	mg/Kg	☼	11/26/19 14:35	11/27/19 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/25/19 08:42	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Acetone	0.010	J	0.018	0.0079	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Trichloroethene	0.00072	J	0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1
Xylenes, Total	0.0014	J	0.0036	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/19/19 17:20	12/01/19 13:26	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/19/19 17:20	12/01/19 13:26	1
Dibromofluoromethane	90		75 - 126	11/19/19 17:20	12/01/19 13:26	1
Toluene-d8 (Surr)	97		75 - 124	11/19/19 17:20	12/01/19 13:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
N-Nitrosodi-n-propylamine	<0.083	*	0.083	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2-Methylnaphthalene	0.047	J	0.083	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Phenanthrene	0.11		0.041	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
Benzo[g,h,i]perylene	0.017	J	0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	132		31 - 166	11/29/19 16:14	12/03/19 03:32	1
Phenol-d5	121		30 - 153	11/29/19 16:14	12/03/19 03:32	1
Nitrobenzene-d5	97		37 - 147	11/29/19 16:14	12/03/19 03:32	1
2-Fluorobiphenyl	93		43 - 145	11/29/19 16:14	12/03/19 03:32	1
2,4,6-Tribromophenol	47		31 - 143	11/29/19 16:14	12/03/19 03:32	1
Terphenyl-d14	100		42 - 157	11/29/19 16:14	12/03/19 03:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J B	1.2	0.24	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Arsenic	7.2		0.62	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Barium	39		0.62	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Beryllium	0.69	B	0.25	0.058	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Boron	19		3.1	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Cadmium	0.084	J B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Calcium	70000	B	120	21	mg/Kg	☼	12/03/19 09:00	12/04/19 10:33	10
Chromium	17	B	0.62	0.31	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Cobalt	13		0.31	0.082	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Copper	25		0.62	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Iron	27000	B	120	65	mg/Kg	☼	12/03/19 09:00	12/04/19 10:33	10
Lead	13		0.31	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Magnesium	26000	B ^	6.2	3.1	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Manganese	370	B	0.62	0.090	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Nickel	35	B	0.62	0.18	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Potassium	3200		31	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Selenium	0.82		0.62	0.37	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Silver	2.4		0.31	0.080	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Sodium	190	B	62	9.2	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Thallium	0.92		0.62	0.31	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Vanadium	21		0.31	0.074	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1
Zinc	52		1.2	0.55	mg/Kg	☼	12/03/19 09:00	12/03/19 16:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.76		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:01	1
Boron	0.12	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:01	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:01	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:01	1
Iron	0.24	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:01	1
Manganese	1.8		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:01	1
Nickel	0.036		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:01	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:01	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:01	1
Zinc	0.17	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:01	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.043		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 20:55	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0066	mg/Kg	☼	11/26/19 14:35	11/27/19 10:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Date Collected: 11/19/19 00:38

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,1-Dichloroethene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Carbon tetrachloride	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Trichloroethene	0.00079	J	0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1
Xylenes, Total	0.0014	J	0.0037	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/19/19 17:20	12/01/19 13:52	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/19/19 17:20	12/01/19 13:52	1
Dibromofluoromethane	93		75 - 126	11/19/19 17:20	12/01/19 13:52	1
Toluene-d8 (Surr)	95		75 - 124	11/19/19 17:20	12/01/19 13:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Date Collected: 11/19/19 00:38

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
N-Nitrosodi-n-propylamine	<0.083	*	0.083	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2-Methylnaphthalene	0.040	J	0.083	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Phenanthrene	0.097		0.041	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Date Collected: 11/19/19 00:38

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 04:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	129		31 - 166				11/29/19 16:14	12/03/19 04:00	1
Phenol-d5	123		30 - 153				11/29/19 16:14	12/03/19 04:00	1
Nitrobenzene-d5	99		37 - 147				11/29/19 16:14	12/03/19 04:00	1
2-Fluorobiphenyl	94		43 - 145				11/29/19 16:14	12/03/19 04:00	1
2,4,6-Tribromophenol	53		31 - 143				11/29/19 16:14	12/03/19 04:00	1
Terphenyl-d14	101		42 - 157				11/29/19 16:14	12/03/19 04:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J B	1.2	0.24	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Arsenic	7.3		0.62	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Barium	42		0.62	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Beryllium	0.74	B	0.25	0.058	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Boron	22		3.1	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Cadmium	0.11	J B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Calcium	53000	B	120	21	mg/Kg	☼	12/03/19 09:00	12/04/19 10:37	10
Chromium	18	B	0.62	0.31	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Cobalt	14		0.31	0.081	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Copper	26		0.62	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Iron	25000	B	120	65	mg/Kg	☼	12/03/19 09:00	12/04/19 10:37	10
Lead	14		0.31	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Magnesium	22000	B ^	6.2	3.1	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Manganese	310	B	0.62	0.090	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Nickel	37	B	0.62	0.18	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Potassium	3700		31	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Selenium	0.94		0.62	0.37	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Silver	2.7		0.31	0.080	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Sodium	210	B	62	9.2	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Thallium	1.1		0.62	0.31	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Vanadium	23		0.31	0.073	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1
Zinc	56		1.2	0.55	mg/Kg	☼	12/03/19 09:00	12/03/19 16:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:05	1
Boron	0.16	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Date Collected: 11/19/19 00:38

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0021	J	0.0050	0.0020	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Cobalt	0.014	J	0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Iron	0.34	J*	0.40	0.20	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Manganese	1.8		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Nickel	0.039		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Silver	<0.025		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:05	1
Zinc	0.15	J B	0.50	0.020	mg/L	-	11/24/19 16:18	11/27/19 20:05	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.063		0.025	0.010	mg/L	-	11/24/19 16:14	11/26/19 20:59	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/24/19 16:18	11/27/19 01:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/24/19 16:18	11/27/19 01:17	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/25/19 10:00	11/26/19 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.018	0.0061	mg/Kg	☼	11/26/19 14:35	11/27/19 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU	-		11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Date Collected: 11/19/19 01:34

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Vinyl acetate	<0.0045		0.0045	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1
Xylenes, Total	0.00079	J	0.0036	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	11/19/19 17:20	12/01/19 14:18	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/19/19 17:20	12/01/19 14:18	1
Dibromofluoromethane	94		75 - 126	11/19/19 17:20	12/01/19 14:18	1
Toluene-d8 (Surr)	95		75 - 124	11/19/19 17:20	12/01/19 14:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Date Collected: 11/19/19 01:34

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2-Methylphenol	<0.21	*	0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
N-Nitrosodi-n-propylamine	<0.084	*	0.084	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Isophorone	<0.21	*	0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2-Methylnaphthalene	0.051	J	0.084	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,4-Dinitrophenol	<0.84	*	0.84	0.73	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Phenanthrene	0.14		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Date Collected: 11/19/19 01:34

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.032	J	0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
Benzo[g,h,i]perylene	0.015	J	0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 04:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	121		31 - 166	11/29/19 16:14	12/03/19 04:28	1
Phenol-d5	123		30 - 153	11/29/19 16:14	12/03/19 04:28	1
Nitrobenzene-d5	96		37 - 147	11/29/19 16:14	12/03/19 04:28	1
2-Fluorobiphenyl	94		43 - 145	11/29/19 16:14	12/03/19 04:28	1
2,4,6-Tribromophenol	55		31 - 143	11/29/19 16:14	12/03/19 04:28	1
Terphenyl-d14	104		42 - 157	11/29/19 16:14	12/03/19 04:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Arsenic	8.2		0.59	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Barium	38		0.59	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Beryllium	0.90	B	0.24	0.055	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Boron	21		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Cadmium	0.071	J B	0.12	0.021	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Calcium	26000	B	12	2.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Chromium	20	B	0.59	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Cobalt	17		0.30	0.078	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Copper	35		0.59	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Iron	22000	B	12	6.2	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Lead	17		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Magnesium	17000	B ^	5.9	2.9	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Manganese	280	B	0.59	0.086	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Nickel	47	B	0.59	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Potassium	4100		30	10	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Selenium	0.99	B	0.59	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Silver	2.6	B	0.30	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Sodium	1200	B	59	8.8	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Thallium	1.4		0.59	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Vanadium	25		0.30	0.070	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1
Zinc	57		1.2	0.52	mg/Kg	☼	12/03/19 09:00	12/03/19 16:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:09	1
Boron	0.091	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Date Collected: 11/19/19 01:34

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:09	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:09	1
Cobalt	0.031		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:09	1
Iron	<0.40	*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:09	1
Manganese	2.4		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:09	1
Nickel	0.066		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:09	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:09	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:09	1
Zinc	0.028	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.26		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:03	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0064	mg/Kg	☼	11/26/19 14:35	11/27/19 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Acetone	0.0079	J	0.017	0.0076	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Chloromethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/19/19 17:20	12/01/19 14:44	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/19/19 17:20	12/01/19 14:44	1
Dibromofluoromethane	93		75 - 126	11/19/19 17:20	12/01/19 14:44	1
Toluene-d8 (Surr)	94		75 - 124	11/19/19 17:20	12/01/19 14:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
N-Nitrosodi-n-propylamine	<0.083	*	0.083	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2-Methylnaphthalene	0.046	J	0.083	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,4-Dinitrophenol	<0.83	*	0.83	0.73	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Phenanthrene	0.17		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
Benzo[g,h,i]perylene	0.015	J	0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 04:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		31 - 166	11/29/19 16:14	12/03/19 04:56	1
Phenol-d5	106		30 - 153	11/29/19 16:14	12/03/19 04:56	1
Nitrobenzene-d5	85		37 - 147	11/29/19 16:14	12/03/19 04:56	1
2-Fluorobiphenyl	84		43 - 145	11/29/19 16:14	12/03/19 04:56	1
2,4,6-Tribromophenol	48		31 - 143	11/29/19 16:14	12/03/19 04:56	1
Terphenyl-d14	97		42 - 157	11/29/19 16:14	12/03/19 04:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Arsenic	8.5		0.60	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Barium	34		0.60	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Beryllium	0.89	B	0.24	0.056	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Boron	21		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Cadmium	0.14	B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Calcium	28000	B	12	2.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Chromium	19	B	0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Cobalt	16		0.30	0.079	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Copper	32		0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Iron	20000	B	12	6.2	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Lead	16		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Magnesium	17000	B ^	6.0	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Manganese	280	B	0.60	0.087	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Nickel	44	B	0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Potassium	3900		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Selenium	1.0	B	0.60	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Silver	2.6	B	0.30	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Sodium	1100	B	60	8.9	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Thallium	1.3		0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Vanadium	24		0.30	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1
Zinc	55		1.2	0.53	mg/Kg	☼	12/03/19 09:00	12/03/19 16:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:13	1
Boron	0.087	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:13	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:13	1
Cobalt	0.031		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:13	1
Iron	<0.40	*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:13	1
Manganese	2.3		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:13	1
Nickel	0.076		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:13	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:13	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:13	1
Zinc	<0.50		0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.073		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:22	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.020	0.0066	mg/Kg	☼	11/26/19 14:35	11/27/19 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Method: 8260B - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
Carbon tetrachloride	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
Chlorobenzene	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
Chloroform	<0.040		0.040	0.020	mg/L			11/27/19 18:20	20
1,2-Dichloroethane	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
1,1-Dichloroethene	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
Methyl Ethyl Ketone	<0.10		0.10	0.050	mg/L			11/27/19 18:20	20
Tetrachloroethene	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
Trichloroethene	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20
Vinyl chloride	<0.020		0.020	0.010	mg/L			11/27/19 18:20	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		11/27/19 18:20	20
Dibromofluoromethane	103		75 - 120		11/27/19 18:20	20
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		11/27/19 18:20	20
Toluene-d8 (Surr)	101		75 - 120		11/27/19 18:20	20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Acetone	0.015	J	0.017	0.0073	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Trichloroethene	0.00070	J	0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1
Xylenes, Total	0.0014	J	0.0034	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/19/19 17:20	12/01/19 15:09	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/19/19 17:20	12/01/19 15:09	1
Dibromofluoromethane	94		75 - 126	11/19/19 17:20	12/01/19 15:09	1
Toluene-d8 (Surr)	96		75 - 124	11/19/19 17:20	12/01/19 15:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
N-Nitrosodi-n-propylamine	<0.082	*	0.082	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Hexachlorocyclopentadiene	<0.82		0.82	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2-Methylnaphthalene	0.045	J	0.082	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Phenanthrene	0.099		0.041	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Chrysene	0.023 J		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
Benzo[g,h,i]perylene	0.016 J		0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 05:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	120		31 - 166	11/29/19 16:14	12/03/19 05:23	1
Phenol-d5	122		30 - 153	11/29/19 16:14	12/03/19 05:23	1
Nitrobenzene-d5	94		37 - 147	11/29/19 16:14	12/03/19 05:23	1
2-Fluorobiphenyl	90		43 - 145	11/29/19 16:14	12/03/19 05:23	1
2,4,6-Tribromophenol	50		31 - 143	11/29/19 16:14	12/03/19 05:23	1
Terphenyl-d14	101		42 - 157	11/29/19 16:14	12/03/19 05:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cresol, o-	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 02:54	1
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 02:54	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		11/25/19 11:48	11/26/19 02:54	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		11/25/19 11:48	11/26/19 02:54	1
Hexachloro-1,3-butadiene	<0.050		0.050	0.050	mg/L		11/25/19 11:48	11/26/19 02:54	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		11/25/19 11:48	11/26/19 02:54	1
m & p - Cresol	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 02:54	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		11/25/19 11:48	11/26/19 02:54	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		11/25/19 11:48	11/26/19 02:54	1
Pyridine	<0.20		0.20	0.20	mg/L		11/25/19 11:48	11/26/19 02:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		11/25/19 11:48	11/26/19 02:54	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		11/25/19 11:48	11/26/19 02:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	94		34 - 110				11/25/19 11:48	11/26/19 02:54	1
2-Fluorophenol	60		27 - 110				11/25/19 11:48	11/26/19 02:54	1
Nitrobenzene-d5	83		36 - 120				11/25/19 11:48	11/26/19 02:54	1
Phenol-d5	38		20 - 100				11/25/19 11:48	11/26/19 02:54	1
Terphenyl-d14	119		40 - 145				11/25/19 11:48	11/26/19 02:54	1
2,4,6-Tribromophenol	86		40 - 145				11/25/19 11:48	11/26/19 02:54	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.010		0.010	0.0050	mg/L		11/26/19 13:37	11/29/19 18:37	1
Endrin	<0.0050		0.0050	0.0025	mg/L		11/26/19 13:37	11/29/19 18:37	1
gamma-BHC (Lindane)	<0.0050		0.0050	0.0025	mg/L		11/26/19 13:37	11/29/19 18:37	1
Heptachlor	<0.0040		0.0040	0.0020	mg/L		11/26/19 13:37	11/29/19 18:37	1
Heptachlor epoxide	<0.0040		0.0040	0.0020	mg/L		11/26/19 13:37	11/29/19 18:37	1
Methoxychlor	<0.010		0.010	0.0050	mg/L		11/26/19 13:37	11/29/19 18:37	1
Toxaphene	<0.050		0.050	0.025	mg/L		11/26/19 13:37	11/29/19 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	100		30 - 130				11/26/19 13:37	11/29/19 18:37	1
Tetrachloro-m-xylene	98		30 - 120				11/26/19 13:37	11/29/19 18:37	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.020		0.020	0.0071	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
PCB-1221	<0.020		0.020	0.0089	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
PCB-1232	<0.020		0.020	0.0088	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
PCB-1242	<0.020		0.020	0.0066	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
PCB-1248	<0.020		0.020	0.0079	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
PCB-1254	<0.020		0.020	0.0044	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
PCB-1260	<0.020		0.020	0.0099	mg/Kg	☼	11/25/19 19:07	11/26/19 09:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		37 - 121				11/25/19 19:07	11/26/19 09:55	1
Tetrachloro-m-xylene	83		49 - 129				11/25/19 19:07	11/26/19 09:55	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.10		0.10	0.050	mg/L		11/26/19 09:30	11/27/19 12:56	1
Silvex (2,4,5-TP)	<0.10		0.10	0.050	mg/L		11/26/19 09:30	11/27/19 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	113		25 - 130				11/26/19 09:30	11/27/19 12:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Arsenic	7.2		0.60	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	40		0.60	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Beryllium	0.75	B	0.24	0.056	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Boron	18		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Cadmium	0.082	J B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Calcium	56000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 10:41	10
Chromium	18	B	0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Copper	26		0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Iron	25000	B	120	62	mg/Kg	☼	12/03/19 09:00	12/04/19 10:41	10
Lead	14		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Magnesium	23000	B ^	6.0	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Manganese	310	B	0.60	0.087	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Nickel	36	B	0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Potassium	3200		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Selenium	0.98		0.60	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Silver	2.6		0.30	0.078	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Sodium	220	B	60	8.9	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Thallium	1.1		0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Vanadium	21		0.30	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1
Zinc	51		1.2	0.53	mg/Kg	☼	12/03/19 09:00	12/03/19 16:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.80		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:18	1
Boron	0.098	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:18	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Cobalt	0.017	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Iron	0.24	J *	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:18	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Nickel	0.044		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:18	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Zinc	0.039	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:19	1

Method: 6010B - TCLP RCRA Metals - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Barium	0.80		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:18	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1
Lead	<0.050		0.050	0.0075	mg/L		11/24/19 16:18	11/27/19 20:18	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:18	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/24/19 16:18	11/27/19 01:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/24/19 16:18	11/27/19 01:25	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/25/19 10:00	11/26/19 10:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.020	0.0066	mg/Kg	☼	11/26/19 14:35	11/27/19 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		99.0	99.0	Degrees F	-		12/04/19 09:42	1
Sulfide, Reactive	<49		49	3.9	mg/Kg	-	11/27/19 20:50	11/27/19 23:00	1
Cyanide, Reactive	<0.47		0.47	0.47	mg/Kg	-	11/27/19 10:50	11/27/19 16:45	1
pH	7.8		0.2	0.2	SU	-		11/25/19 09:39	1
Paint Filter	Pass				No Unit	-		12/02/19 19:38	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Date Collected: 11/19/19 01:55

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Acetone	0.018		0.015	0.0064	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1
Xylenes, Total	0.00086	J	0.0030	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/19/19 17:20	12/01/19 15:36	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/19/19 17:20	12/01/19 15:36	1
Dibromofluoromethane	93		75 - 126	11/19/19 17:20	12/01/19 15:36	1
Toluene-d8 (Surr)	96		75 - 124	11/19/19 17:20	12/01/19 15:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Date Collected: 11/19/19 01:55

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
N-Nitrosodi-n-propylamine	<0.084	*	0.084	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Isophorone	<0.21	*	0.21	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2-Methylnaphthalene	0.047	J	0.084	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,4-Dinitrophenol	<0.84	*	0.84	0.73	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Pentachlorophenol	<0.84		0.84	0.66	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Phenanthrene	0.10		0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Date Collected: 11/19/19 01:55

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.030	J	0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
Benzo[g,h,i]perylene	0.027	J	0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166	11/29/19 16:14	12/03/19 12:15	1
Phenol-d5	64		30 - 153	11/29/19 16:14	12/03/19 12:15	1
Nitrobenzene-d5	70		37 - 147	11/29/19 16:14	12/03/19 12:15	1
2-Fluorobiphenyl	89		43 - 145	11/29/19 16:14	12/03/19 12:15	1
2,4,6-Tribromophenol	42		31 - 143	11/29/19 16:14	12/03/19 12:15	1
Terphenyl-d14	104		42 - 157	11/29/19 16:14	12/03/19 12:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	J B	1.2	0.24	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Arsenic	7.6		0.61	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Barium	40		0.61	0.069	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Beryllium	0.73	B	0.24	0.057	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Boron	19		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Cadmium	0.14	B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Calcium	57000	B	120	21	mg/Kg	☼	12/03/19 09:00	12/04/19 10:46	10
Chromium	18	B	0.61	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Cobalt	14		0.30	0.080	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Copper	28		0.61	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Iron	27000	B	120	63	mg/Kg	☼	12/03/19 09:00	12/04/19 10:46	10
Lead	22		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Magnesium	23000	B ^	6.1	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Manganese	310	B	0.61	0.088	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Nickel	38	B	0.61	0.18	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Potassium	3400		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Selenium	0.85		0.61	0.36	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Silver	2.6		0.30	0.078	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Sodium	190	B	61	9.0	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Thallium	0.69		0.61	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Vanadium	22		0.30	0.072	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1
Zinc	62		1.2	0.53	mg/Kg	☼	12/03/19 09:00	12/03/19 16:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.74		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:30	1
Boron	0.11	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Date Collected: 11/19/19 01:55

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:30	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:30	1
Cobalt	0.013	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:30	1
Iron	<0.40	*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:30	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:30	1
Nickel	0.036		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:30	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:30	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:30	1
Zinc	0.32	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:30	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.037		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:23	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0064	mg/Kg	☼	11/26/19 14:35	11/27/19 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Acetone	0.019		0.016	0.0068	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1
Xylenes, Total	0.0015	J	0.0031	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/19/19 17:20	12/01/19 16:02	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/19/19 17:20	12/01/19 16:02	1
Dibromofluoromethane	93		75 - 126	11/19/19 17:20	12/01/19 16:02	1
Toluene-d8 (Surr)	94		75 - 124	11/19/19 17:20	12/01/19 16:02	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
N-Nitrosodi-n-propylamine	<0.083	*	0.083	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2-Methylnaphthalene	0.049	J	0.083	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Fluorene	0.0099	J	0.041	0.0058	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Phenanthrene	0.11		0.041	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166				11/29/19 16:14	12/03/19 12:42	1
Phenol-d5	66		30 - 153				11/29/19 16:14	12/03/19 12:42	1
Nitrobenzene-d5	76		37 - 147				11/29/19 16:14	12/03/19 12:42	1
2-Fluorobiphenyl	97		43 - 145				11/29/19 16:14	12/03/19 12:42	1
2,4,6-Tribromophenol	32		31 - 143				11/29/19 16:14	12/03/19 12:42	1
Terphenyl-d14	98		42 - 157				11/29/19 16:14	12/03/19 12:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Arsenic	7.3		0.58	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Barium	41		0.58	0.066	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Beryllium	0.75	B	0.23	0.054	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Boron	21		2.9	0.27	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Cadmium	0.066	J B	0.12	0.021	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Calcium	50000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 13:25	10
Chromium	18	B	0.58	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Copper	26		0.58	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Iron	23000	B	120	60	mg/Kg	☼	12/03/19 09:00	12/04/19 13:25	10
Lead	14		0.29	0.13	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Magnesium	22000	B	5.8	2.9	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Manganese	300	B	0.58	0.084	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Nickel	37	B	0.58	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Potassium	3600		29	10	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Selenium	1.1		0.58	0.34	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Silver	2.7		0.29	0.075	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Sodium	200	B	58	8.6	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Thallium	1.0		0.58	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Vanadium	23		0.29	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1
Zinc	53		1.2	0.51	mg/Kg	☼	12/03/19 09:00	12/03/19 17:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:34	1
Boron	0.12	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:34	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:34	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:34	1
Iron	0.22	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:34	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:34	1
Nickel	0.036		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:34	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:34	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:34	1
Zinc	0.081	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:34	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.080		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:27	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0062	mg/Kg	☼	11/26/19 14:35	11/27/19 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1
Xylenes, Total	0.00062	J	0.0034	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/19/19 17:20	12/01/19 16:27	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/19/19 17:20	12/01/19 16:27	1
Dibromofluoromethane	94		75 - 126	11/19/19 17:20	12/01/19 16:27	1
Toluene-d8 (Surr)	93		75 - 124	11/19/19 17:20	12/01/19 16:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2-Methylphenol	<0.20	*	0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
N-Nitrosodi-n-propylamine	<0.080	*	0.080	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Nitrobenzene	<0.040	*	0.040	0.0099	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2-Methylnaphthalene	0.024	J	0.080	0.0073	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Phenanthrene	0.088		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
Benzo[g,h,i]perylene	0.016	J	0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	73		31 - 166	11/29/19 16:14	12/03/19 14:06	1
Phenol-d5	70		30 - 153	11/29/19 16:14	12/03/19 14:06	1
Nitrobenzene-d5	79		37 - 147	11/29/19 16:14	12/03/19 14:06	1
2-Fluorobiphenyl	97		43 - 145	11/29/19 16:14	12/03/19 14:06	1
2,4,6-Tribromophenol	40		31 - 143	11/29/19 16:14	12/03/19 14:06	1
Terphenyl-d14	108		42 - 157	11/29/19 16:14	12/03/19 14:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J B	1.2	0.22	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Arsenic	6.8		0.58	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Barium	36		0.58	0.066	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Beryllium	0.71	B	0.23	0.054	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Boron	18		2.9	0.27	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Cadmium	0.099	J B	0.12	0.021	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Calcium	59000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 10:54	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Copper	26		0.58	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Iron	23000	B	120	60	mg/Kg	☼	12/03/19 09:00	12/04/19 10:54	10
Lead	14		0.29	0.13	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Magnesium	26000	B	5.8	2.9	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Manganese	320	B	0.58	0.084	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Nickel	34	B	0.58	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Potassium	3300		29	10	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Selenium	0.83		0.58	0.34	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Silver	2.5		0.29	0.075	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Sodium	1200	B	58	8.6	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Thallium	0.98		0.58	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Vanadium	21		0.29	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1
Zinc	49		1.2	0.51	mg/Kg	☼	12/03/19 09:00	12/03/19 17:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:38	1
Boron	0.069	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:38	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:38	1
Cobalt	0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:38	1
Iron	<0.40	*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:38	1
Manganese	2.0		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:38	1
Nickel	0.059		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:38	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:38	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:38	1
Zinc	0.18	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:38	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.19		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:31	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:40	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0063	mg/Kg	☼	11/26/19 14:35	11/27/19 10:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Acetone	0.027		0.016	0.0070	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1
Xylenes, Total	0.00068	J	0.0032	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/19/19 17:20	12/01/19 16:53	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/19/19 17:20	12/01/19 16:53	1
Dibromofluoromethane	92		75 - 126	11/19/19 17:20	12/01/19 16:53	1
Toluene-d8 (Surr)	95		75 - 124	11/19/19 17:20	12/01/19 16:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
N-Nitrosodi-n-propylamine	<0.081	*	0.081	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2-Methylnaphthalene	0.076	J	0.081	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Acenaphthene	0.018	J	0.040	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Phenanthrene	0.15		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				11/29/19 16:14	12/03/19 14:34	1
Phenol-d5	71		30 - 153				11/29/19 16:14	12/03/19 14:34	1
Nitrobenzene-d5	86		37 - 147				11/29/19 16:14	12/03/19 14:34	1
2-Fluorobiphenyl	100		43 - 145				11/29/19 16:14	12/03/19 14:34	1
2,4,6-Tribromophenol	35		31 - 143				11/29/19 16:14	12/03/19 14:34	1
Terphenyl-d14	105		42 - 157				11/29/19 16:14	12/03/19 14:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Arsenic	7.1		0.59	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Barium	36		0.59	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Beryllium	0.70	B	0.24	0.056	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Boron	18		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Cadmium	0.081	J B	0.12	0.021	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Calcium	60000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 10:58	10
Chromium	16	B	0.59	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Cobalt	13		0.30	0.078	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Copper	28		0.59	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Iron	24000	B	120	62	mg/Kg	☼	12/03/19 09:00	12/04/19 10:58	10
Lead	15		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Magnesium	26000	B	5.9	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Manganese	340	B	0.59	0.086	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Nickel	35	B	0.59	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Potassium	3100		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Selenium	0.83		0.59	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Silver	2.4		0.30	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Sodium	410	B	59	8.8	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Thallium	1.1		0.59	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Vanadium	20		0.30	0.070	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1
Zinc	47		1.2	0.52	mg/Kg	☼	12/03/19 09:00	12/03/19 17:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:43	1
Boron	0.10	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:43	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:43	1
Cobalt	0.020	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:43	1
Iron	0.32	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:43	1
Manganese	2.0		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:43	1
Nickel	0.049		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:43	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:43	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:43	1
Zinc	0.050	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:43	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.027		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:35	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0065	mg/Kg	☼	11/26/19 14:35	11/27/19 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1
Xylenes, Total	0.00075	J	0.0032	0.00052	mg/Kg	☼	11/19/19 17:20	12/01/19 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/19/19 17:20	12/01/19 17:19	1
4-Bromofluorobenzene (Surr)	100		75 - 131	11/19/19 17:20	12/01/19 17:19	1
Dibromofluoromethane	93		75 - 126	11/19/19 17:20	12/01/19 17:19	1
Toluene-d8 (Surr)	95		75 - 124	11/19/19 17:20	12/01/19 17:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
N-Nitrosodi-n-propylamine	<0.081	*	0.081	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2-Methylnaphthalene	0.035	J	0.081	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Phenanthrene	0.12		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 15:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				11/29/19 16:14	12/03/19 15:02	1
Phenol-d5	70		30 - 153				11/29/19 16:14	12/03/19 15:02	1
Nitrobenzene-d5	79		37 - 147				11/29/19 16:14	12/03/19 15:02	1
2-Fluorobiphenyl	97		43 - 145				11/29/19 16:14	12/03/19 15:02	1
2,4,6-Tribromophenol	42		31 - 143				11/29/19 16:14	12/03/19 15:02	1
Terphenyl-d14	107		42 - 157				11/29/19 16:14	12/03/19 15:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47	J B	1.1	0.22	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Arsenic	7.5		0.56	0.19	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Barium	33		0.56	0.063	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Beryllium	0.71	B	0.22	0.052	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Boron	17		2.8	0.26	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Cadmium	0.073	J B	0.11	0.020	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Calcium	58000	B	110	19	mg/Kg	☼	12/03/19 09:00	12/04/19 11:16	10
Chromium	16	B	0.56	0.27	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Cobalt	14		0.28	0.073	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Copper	28		0.56	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Iron	24000	B	110	58	mg/Kg	☼	12/03/19 09:00	12/04/19 11:16	10
Lead	15		0.28	0.13	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Magnesium	24000	B	5.6	2.8	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Manganese	320	B	0.56	0.081	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Nickel	36	B	0.56	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Potassium	3000		28	9.8	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Selenium	0.81		0.56	0.33	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Silver	2.3		0.28	0.072	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Sodium	630	B	56	8.2	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Thallium	1.2		0.56	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Vanadium	20		0.28	0.066	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1
Zinc	47		1.1	0.49	mg/Kg	☼	12/03/19 09:00	12/03/19 17:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:47	1
Boron	0.083	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:47	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:47	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:47	1
Iron	0.22	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:47	1
Manganese	1.8		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:47	1
Nickel	0.038		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:47	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:47	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:47	1
Zinc	0.034	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.027		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:40	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:45	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0064	mg/Kg	☼	11/26/19 14:35	11/27/19 10:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Date Collected: 11/19/19 03:25

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00092	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,1-Dichloroethane	<0.0021		0.0021	0.00073	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,1-Dichloroethene	<0.0021		0.0021	0.00074	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,2-Dichloroethane	<0.0053		0.0053	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
2-Butanone (MEK)	<0.0053		0.0053	0.0024	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Acetone	<0.021		0.021	0.0093	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Benzene	<0.0021		0.0021	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Bromodichloromethane	<0.0021		0.0021	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Carbon tetrachloride	<0.0021		0.0021	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Chlorobenzene	<0.0021		0.0021	0.00079	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Chloroform	<0.0021		0.0021	0.00074	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Dibromochloromethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00063	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Styrene	<0.0021		0.0021	0.00065	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Tetrachloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Toluene	<0.0021		0.0021	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00095	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Vinyl acetate	<0.0053		0.0053	0.0019	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Vinyl chloride	<0.0021		0.0021	0.00095	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1
Xylenes, Total	<0.0043		0.0043	0.00068	mg/Kg	☼	11/19/19 17:20	12/01/19 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/19/19 17:20	12/01/19 17:45	1
4-Bromofluorobenzene (Surr)	100		75 - 131	11/19/19 17:20	12/01/19 17:45	1
Dibromofluoromethane	92		75 - 126	11/19/19 17:20	12/01/19 17:45	1
Toluene-d8 (Surr)	93		75 - 124	11/19/19 17:20	12/01/19 17:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.090	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Date Collected: 11/19/19 03:25

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
N-Nitrosodi-n-propylamine	<0.081	*	0.081	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2-Methylnaphthalene	0.053	J	0.081	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Phenanthrene	0.13		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Date Collected: 11/19/19 03:25

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	J	0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 15:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166				11/29/19 16:14	12/03/19 15:30	1
Phenol-d5	66		30 - 153				11/29/19 16:14	12/03/19 15:30	1
Nitrobenzene-d5	78		37 - 147				11/29/19 16:14	12/03/19 15:30	1
2-Fluorobiphenyl	97		43 - 145				11/29/19 16:14	12/03/19 15:30	1
2,4,6-Tribromophenol	29	X	31 - 143				11/29/19 16:14	12/03/19 15:30	1
Terphenyl-d14	101		42 - 157				11/29/19 16:14	12/03/19 15:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Arsenic	7.3		0.60	0.21	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Barium	40		0.60	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Beryllium	0.77	B	0.24	0.056	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Boron	20		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Cadmium	0.17	B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Calcium	58000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 11:20	10
Chromium	18	B	0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Cobalt	14		0.30	0.079	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Copper	28		0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Iron	25000	B	120	62	mg/Kg	☼	12/03/19 09:00	12/04/19 11:20	10
Lead	15		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Magnesium	23000	B	6.0	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Manganese	310	B	0.60	0.087	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Nickel	36	B	0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Potassium	3500		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Selenium	0.91		0.60	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Silver	2.7		0.30	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Sodium	210	B	60	8.9	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Thallium	0.90		0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Vanadium	23		0.30	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1
Zinc	59		1.2	0.53	mg/Kg	☼	12/03/19 09:00	12/03/19 17:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:51	1
Boron	0.11	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Date Collected: 11/19/19 03:25

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:51	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:51	1
Cobalt	0.016	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:51	1
Iron	0.31	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:51	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:51	1
Nickel	0.037		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:51	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:51	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:51	1
Zinc	0.12	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:51	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.040		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:44	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0064	mg/Kg	☼	11/26/19 14:35	11/27/19 10:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Date Collected: 11/19/19 04:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Acetone	0.013	J	0.017	0.0073	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/19/19 17:20	12/01/19 18:12	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/19/19 17:20	12/01/19 18:12	1
Dibromofluoromethane	94		75 - 126	11/19/19 17:20	12/01/19 18:12	1
Toluene-d8 (Surr)	95		75 - 124	11/19/19 17:20	12/01/19 18:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.088	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Date Collected: 11/19/19 04:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2-Methylphenol	<0.20	*	0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
N-Nitrosodi-n-propylamine	<0.080	*	0.080	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Nitrobenzene	<0.040	*	0.040	0.0099	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2-Methylnaphthalene	0.014	J	0.080	0.0073	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Phenanthrene	0.051		0.040	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Date Collected: 11/19/19 04:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 15:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166				11/29/19 16:14	12/03/19 15:58	1
Phenol-d5	67		30 - 153				11/29/19 16:14	12/03/19 15:58	1
Nitrobenzene-d5	78		37 - 147				11/29/19 16:14	12/03/19 15:58	1
2-Fluorobiphenyl	95		43 - 145				11/29/19 16:14	12/03/19 15:58	1
2,4,6-Tribromophenol	45		31 - 143				11/29/19 16:14	12/03/19 15:58	1
Terphenyl-d14	103		42 - 157				11/29/19 16:14	12/03/19 15:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	J B	1.1	0.22	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Arsenic	6.2		0.56	0.19	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Barium	33		0.56	0.064	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Beryllium	0.61	B	0.22	0.052	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Boron	15		2.8	0.26	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Cadmium	0.090	J B	0.11	0.020	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Calcium	53000	B	110	19	mg/Kg	☼	12/03/19 09:00	12/04/19 11:24	10
Chromium	15	B	0.56	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Cobalt	12		0.28	0.074	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Copper	24		0.56	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Iron	21000	B	110	58	mg/Kg	☼	12/03/19 09:00	12/04/19 11:24	10
Lead	14		0.28	0.13	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Magnesium	24000	B	5.6	2.8	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Manganese	340	B	0.56	0.081	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Nickel	32	B	0.56	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Potassium	2800		28	9.9	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Selenium	0.76		0.56	0.33	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Silver	2.4		0.28	0.072	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Sodium	880	B	56	8.3	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Thallium	0.84		0.56	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Vanadium	19		0.28	0.066	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1
Zinc	54		1.1	0.49	mg/Kg	☼	12/03/19 09:00	12/03/19 17:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.52		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:55	1
Boron	0.076	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Date Collected: 11/19/19 04:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0026	J	0.0050	0.0020	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Cobalt	0.039		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Iron	0.34	J*	0.40	0.20	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Manganese	3.7		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Nickel	0.067		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Silver	<0.025		0.025	0.010	mg/L	-	11/24/19 16:18	11/27/19 20:55	1
Zinc	0.19	J B	0.50	0.020	mg/L	-	11/24/19 16:18	11/27/19 20:55	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.51		0.025	0.010	mg/L	-	11/24/19 16:14	11/26/19 21:48	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/24/19 16:18	11/27/19 01:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/24/19 16:18	11/27/19 01:50	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/25/19 10:00	11/26/19 10:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0062	mg/Kg	☼	11/26/19 14:35	11/27/19 10:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU	-		11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/19/19 17:20	12/01/19 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/19/19 17:20	12/01/19 18:37	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/19/19 17:20	12/01/19 18:37	1
Dibromofluoromethane	95		75 - 126	11/19/19 17:20	12/01/19 18:37	1
Toluene-d8 (Surr)	94		75 - 124	11/19/19 17:20	12/01/19 18:37	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
N-Nitrosodi-n-propylamine	<0.081	*	0.081	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2-Methylnaphthalene	0.031	J	0.081	0.0074	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Phenanthrene	0.078		0.040	0.0056	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/29/19 16:14	12/03/19 16:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		31 - 166				11/29/19 16:14	12/03/19 16:26	1
Phenol-d5	62		30 - 153				11/29/19 16:14	12/03/19 16:26	1
Nitrobenzene-d5	67		37 - 147				11/29/19 16:14	12/03/19 16:26	1
2-Fluorobiphenyl	89		43 - 145				11/29/19 16:14	12/03/19 16:26	1
2,4,6-Tribromophenol	29	X	31 - 143				11/29/19 16:14	12/03/19 16:26	1
Terphenyl-d14	100		42 - 157				11/29/19 16:14	12/03/19 16:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J B	1.2	0.23	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Arsenic	6.7		0.60	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Barium	34		0.60	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Beryllium	0.68	B	0.24	0.056	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Boron	18		3.0	0.28	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Cadmium	0.080	J B	0.12	0.022	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Calcium	62000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 11:29	10
Chromium	16	B	0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Cobalt	12		0.30	0.078	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Copper	24		0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Iron	23000	B	120	62	mg/Kg	☼	12/03/19 09:00	12/04/19 11:29	10
Lead	13		0.30	0.14	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Magnesium	26000	B	6.0	3.0	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Manganese	310	B	0.60	0.087	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Nickel	33	B	0.60	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Potassium	3100		30	11	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Selenium	0.73		0.60	0.35	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Silver	2.3		0.30	0.077	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Sodium	470	B	60	8.9	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Thallium	0.80		0.60	0.30	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1
Zinc	48		1.2	0.53	mg/Kg	☼	12/03/19 09:00	12/03/19 17:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.69		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 20:59	1
Boron	0.10	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 20:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 20:59	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:59	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:59	1
Iron	0.23	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 20:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 20:59	1
Manganese	1.8		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:59	1
Nickel	0.038		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:59	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 20:59	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 20:59	1
Zinc	0.15	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 20:59	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.030		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:52	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:52	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0060	mg/Kg	☼	11/26/19 14:35	11/27/19 10:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/25/19 09:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0030		0.0030	0.00099	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,1,2,2-Tetrachloroethane	<0.0030		0.0030	0.00094	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,1,2-Trichloroethane	<0.0030		0.0030	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,1-Dichloroethane	<0.0030		0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,1-Dichloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,2-Dichloroethane	<0.0074		0.0074	0.0023	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,2-Dichloropropane	<0.0030		0.0030	0.00076	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
1,3-Dichloropropene, Total	<0.0030		0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
2-Butanone (MEK)	<0.0074		0.0074	0.0033	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
2-Hexanone	<0.0074		0.0074	0.0023	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
4-Methyl-2-pentanone (MIBK)	<0.0074		0.0074	0.0022	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Acetone	<0.030		0.030	0.013	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Benzene	<0.0030		0.0030	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Bromodichloromethane	<0.0030		0.0030	0.00060	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Bromoform	<0.0030		0.0030	0.00086	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Bromomethane	<0.0074		0.0074	0.0028	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Carbon disulfide	<0.0074		0.0074	0.0015	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Carbon tetrachloride	<0.0030		0.0030	0.00086	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Chlorobenzene	<0.0030		0.0030	0.0011	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Chloroethane	<0.0074		0.0074	0.0022	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Chloroform	<0.0030		0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Chloromethane	<0.0074		0.0074	0.0030	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
cis-1,2-Dichloroethene	<0.0030		0.0030	0.00083	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
cis-1,3-Dichloropropene	<0.0030		0.0030	0.00089	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Dibromochloromethane	<0.0030		0.0030	0.00097	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Ethylbenzene	<0.0030		0.0030	0.0014	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Methyl tert-butyl ether	<0.0030		0.0030	0.00087	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Methylene Chloride	<0.0074		0.0074	0.0029	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Styrene	<0.0030		0.0030	0.00089	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Tetrachloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Toluene	<0.0030		0.0030	0.00075	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
trans-1,2-Dichloroethene	<0.0030		0.0030	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
trans-1,3-Dichloropropene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Trichloroethene	0.0010	J	0.0030	0.0010	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Vinyl acetate	<0.0074		0.0074	0.0026	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Vinyl chloride	<0.0030		0.0030	0.0013	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1
Xylenes, Total	<0.0059		0.0059	0.00095	mg/Kg	☼	11/19/19 17:20	12/01/19 19:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/19/19 17:20	12/01/19 19:03	1
4-Bromofluorobenzene (Surr)	100		75 - 131	11/19/19 17:20	12/01/19 19:03	1
Dibromofluoromethane	92		75 - 126	11/19/19 17:20	12/01/19 19:03	1
Toluene-d8 (Surr)	93		75 - 124	11/19/19 17:20	12/01/19 19:03	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.091	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.047	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
N-Nitrosodi-n-propylamine	<0.082	*	0.082	0.050	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Isophorone	<0.20	*	0.20	0.046	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2-Methylnaphthalene	0.027	J	0.082	0.0075	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Phenanthrene	0.092		0.040	0.0057	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.028	J	0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	11/29/19 16:14	12/03/19 16:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166				11/29/19 16:14	12/03/19 16:54	1
Phenol-d5	65		30 - 153				11/29/19 16:14	12/03/19 16:54	1
Nitrobenzene-d5	69		37 - 147				11/29/19 16:14	12/03/19 16:54	1
2-Fluorobiphenyl	87		43 - 145				11/29/19 16:14	12/03/19 16:54	1
2,4,6-Tribromophenol	30	X	31 - 143				11/29/19 16:14	12/03/19 16:54	1
Terphenyl-d14	97		42 - 157				11/29/19 16:14	12/03/19 16:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J B	1.2	0.22	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Arsenic	7.1		0.58	0.20	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Barium	36		0.58	0.066	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Beryllium	0.75	B	0.23	0.054	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Boron	18		2.9	0.27	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Cadmium	0.11	J B	0.12	0.021	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Calcium	55000	B	120	20	mg/Kg	☼	12/03/19 09:00	12/04/19 11:33	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Copper	27		0.58	0.16	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Iron	23000	B	120	60	mg/Kg	☼	12/03/19 09:00	12/04/19 11:33	10
Lead	16		0.29	0.13	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Magnesium	24000	B	5.8	2.9	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Manganese	320	B	0.58	0.084	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Nickel	35	B	0.58	0.17	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Potassium	3100		29	10	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Selenium	0.70		0.58	0.34	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Silver	2.4		0.29	0.074	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Sodium	190	B	58	8.5	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Vanadium	20		0.29	0.068	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1
Zinc	57		1.2	0.51	mg/Kg	☼	12/03/19 09:00	12/03/19 17:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 21:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 21:04	1
Boron	0.12	J	0.50	0.050	mg/L		11/24/19 16:18	11/27/19 21:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 21:04	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 21:04	1
Cobalt	0.015	J	0.025	0.010	mg/L		11/24/19 16:18	11/27/19 21:04	1
Iron	0.21	J*	0.40	0.20	mg/L		11/24/19 16:18	11/27/19 21:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 21:04	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 21:04	1
Nickel	0.039		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 21:04	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 21:04	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 21:04	1
Zinc	0.026	J B	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 21:04	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.032		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 21:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 02:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 02:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0064	mg/Kg	☼	11/26/19 14:35	11/27/19 10:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/25/19 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

GC/MS VOA

Leach Batch: 517434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	1311	

Prep Batch: 517493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	5035	
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	5035	
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	5035	
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	5035	
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	5035	
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	5035	
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	5035	
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	5035	
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	5035	
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	5035	
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	5035	
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	5035	
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	5035	
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	5035	
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	5035	
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	5035	
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	5035	

Analysis Batch: 517534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	8260B	517434
MB 500-517534/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-517534/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 517969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	8260B	517493
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	8260B	517493
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	8260B	517493
MB 500-517969/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-517969/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-517969/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 518015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	8260B	517493
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	8260B	517493
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	8260B	517493
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	8260B	517493
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	8260B	517493
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	8260B	517493
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	8260B	517493
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	8260B	517493
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	8260B	517493
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	8260B	517493
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	8260B	517493
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	8260B	517493

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

GC/MS VOA (Continued)

Analysis Batch: 518015 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	8260B	517493
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	8260B	517493
MB 500-518015/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-518015/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-518015/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 516882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	1311	
LB 500-516882/1-D	Method Blank	TCLP	Solid	1311	
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	1311	

Prep Batch: 517214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	3510C	516882
LB 500-516882/1-D	Method Blank	TCLP	Solid	3510C	516882
MB 500-517214/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-517214/2-A	Lab Control Sample	Total/NA	Solid	3510C	
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	3510C	516882

Analysis Batch: 517259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	8270D	517214
LB 500-516882/1-D	Method Blank	TCLP	Solid	8270D	517214
MB 500-517214/1-A	Method Blank	Total/NA	Solid	8270D	517214
LCS 500-517214/2-A	Lab Control Sample	Total/NA	Solid	8270D	517214
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	8270D	517214

Prep Batch: 517923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	3541	
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	3541	
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	3541	
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	3541	
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	3541	
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	3541	
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	3541	
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	3541	
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	3541	
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	3541	
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	3541	
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	3541	
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	3541	
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	3541	
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	3541	
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	3541	
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	3541	
MB 500-517923/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-517923/2-A	Lab Control Sample	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

GC/MS Semi VOA (Continued)

Prep Batch: 517923 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1 MS	2615V2-AI-B01 (0-6)	Total/NA	Solid	3541	
500-173686-1 MSD	2615V2-AI-B01 (0-6)	Total/NA	Solid	3541	

Analysis Batch: 518079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-517923/1-A	Method Blank	Total/NA	Solid	8270D	517923
LCS 500-517923/2-A	Lab Control Sample	Total/NA	Solid	8270D	517923

Analysis Batch: 518274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	8270D	517923
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	8270D	517923
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	8270D	517923
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	8270D	517923
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	8270D	517923
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	8270D	517923
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	8270D	517923
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	8270D	517923

Analysis Batch: 518370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	8270D	517923
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	8270D	517923
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	8270D	517923
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	8270D	517923
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	8270D	517923
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	8270D	517923
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	8270D	517923
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	8270D	517923
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	8270D	517923

Analysis Batch: 518390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1 MS	2615V2-AI-B01 (0-6)	Total/NA	Solid	8270D	517923
500-173686-1 MSD	2615V2-AI-B01 (0-6)	Total/NA	Solid	8270D	517923

GC Semi VOA

Leach Batch: 516882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	1311	
LB 500-516882/1-E	Method Blank	TCLP	Solid	1311	
LB 500-516882/1-F	Method Blank	TCLP	Solid	1311	
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	1311	

Prep Batch: 517271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	3541	
MB 500-517271/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-517271/2-A	Lab Control Sample	Total/NA	Solid	3541	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

GC Semi VOA

Analysis Batch: 517355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	8082A	517271
MB 500-517271/1-A	Method Blank	Total/NA	Solid	8082A	517271
LCS 500-517271/2-A	Lab Control Sample	Total/NA	Solid	8082A	517271

Prep Batch: 517382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	8151A	516882
LB 500-516882/1-E	Method Blank	TCLP	Solid	8151A	516882
MB 500-517382/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 500-517382/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Prep Batch: 517422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	3510C	516882
LB 500-516882/1-F	Method Blank	TCLP	Solid	3510C	516882
MB 500-517422/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-517422/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCS 500-517422/3-A	Lab Control Sample	Total/NA	Solid	3510C	
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	3510C	516882
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	3510C	516882

Analysis Batch: 517512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	8151	517382
LB 500-516882/1-E	Method Blank	TCLP	Solid	8151	517382
MB 500-517382/1-A	Method Blank	Total/NA	Solid	8151	517382
LCS 500-517382/2-A	Lab Control Sample	Total/NA	Solid	8151	517382

Analysis Batch: 517875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	8081B	517422
LB 500-516882/1-F	Method Blank	TCLP	Solid	8081B	517422
MB 500-517422/1-A	Method Blank	Total/NA	Solid	8081B	517422
LCS 500-517422/2-A	Lab Control Sample	Total/NA	Solid	8081B	517422
LCS 500-517422/3-A	Lab Control Sample	Total/NA	Solid	8081B	517422
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	8081B	517422
500-173686-8 MS	2615V2-AI-B02 (12-18)	TCLP	Solid	8081B	517422

Metals

Leach Batch: 516880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	SPLP East	Solid	1312	
500-173686-2	2615V2-AI-B01 (6-12)	SPLP East	Solid	1312	
500-173686-3	2615V2-AI-B01 (12-18)	SPLP East	Solid	1312	
500-173686-4	2615V2-AI-B01 (18-24)	SPLP East	Solid	1312	
500-173686-5	2615V2-AI-B01 (24-30)	SPLP East	Solid	1312	
500-173686-6	2615V2-AI-B02 (0-6)	SPLP East	Solid	1312	
500-173686-7	2615V2-AI-B02 (6-12)	SPLP East	Solid	1312	
500-173686-8	2615V2-AI-B02 (12-18)	SPLP East	Solid	1312	
500-173686-9	2615V2-AI-B02 (18-24)	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Leach Batch: 516880 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-10	2615V2-AI-B02 (24-30)	SPLP East	Solid	1312	
500-173686-11	2615V2-AI-B27 (0-5)	SPLP East	Solid	1312	
500-173686-12	2615V2-AI-B27 (5-10)	SPLP East	Solid	1312	
500-173686-13	2615V2-AI-B27 (5-10)D	SPLP East	Solid	1312	
500-173686-14	2615V2-AI-B27 (10-15)	SPLP East	Solid	1312	
500-173686-15	2615V2-AI-B26 (0-5)	SPLP East	Solid	1312	
500-173686-16	2615V2-AI-B26 (5-10)	SPLP East	Solid	1312	
500-173686-17	2615V2-AI-B26 (10-15)	SPLP East	Solid	1312	
LB 500-516880/1-B	Method Blank	SPLP East	Solid	1312	
500-173686-17 MS	2615V2-AI-B26 (10-15)	SPLP East	Solid	1312	
500-173686-17 DU	2615V2-AI-B26 (10-15)	SPLP East	Solid	1312	

Leach Batch: 516882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	TCLP	Solid	1311	
500-173686-2	2615V2-AI-B01 (6-12)	TCLP	Solid	1311	
500-173686-3	2615V2-AI-B01 (12-18)	TCLP	Solid	1311	
500-173686-4	2615V2-AI-B01 (18-24)	TCLP	Solid	1311	
500-173686-5	2615V2-AI-B01 (24-30)	TCLP	Solid	1311	
500-173686-6	2615V2-AI-B02 (0-6)	TCLP	Solid	1311	
500-173686-7	2615V2-AI-B02 (6-12)	TCLP	Solid	1311	
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	1311	
500-173686-9	2615V2-AI-B02 (18-24)	TCLP	Solid	1311	
500-173686-10	2615V2-AI-B02 (24-30)	TCLP	Solid	1311	
500-173686-11	2615V2-AI-B27 (0-5)	TCLP	Solid	1311	
500-173686-12	2615V2-AI-B27 (5-10)	TCLP	Solid	1311	
500-173686-13	2615V2-AI-B27 (5-10)D	TCLP	Solid	1311	
500-173686-14	2615V2-AI-B27 (10-15)	TCLP	Solid	1311	
500-173686-15	2615V2-AI-B26 (0-5)	TCLP	Solid	1311	
500-173686-16	2615V2-AI-B26 (5-10)	TCLP	Solid	1311	
500-173686-17	2615V2-AI-B26 (10-15)	TCLP	Solid	1311	
LB 500-516882/1-B	Method Blank	TCLP	Solid	1311	
LB 500-516882/1-C	Method Blank	TCLP	Solid	1311	
500-173686-7 MS	2615V2-AI-B02 (6-12)	TCLP	Solid	1311	
500-173686-17 MS	2615V2-AI-B26 (10-15)	TCLP	Solid	1311	
500-173686-7 DU	2615V2-AI-B02 (6-12)	TCLP	Solid	1311	
500-173686-17 DU	2615V2-AI-B26 (10-15)	TCLP	Solid	1311	

Prep Batch: 517066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	SPLP East	Solid	3010A	516880
500-173686-2	2615V2-AI-B01 (6-12)	SPLP East	Solid	3010A	516880
500-173686-3	2615V2-AI-B01 (12-18)	SPLP East	Solid	3010A	516880
500-173686-4	2615V2-AI-B01 (18-24)	SPLP East	Solid	3010A	516880
500-173686-5	2615V2-AI-B01 (24-30)	SPLP East	Solid	3010A	516880
500-173686-6	2615V2-AI-B02 (0-6)	SPLP East	Solid	3010A	516880
500-173686-7	2615V2-AI-B02 (6-12)	SPLP East	Solid	3010A	516880
500-173686-8	2615V2-AI-B02 (12-18)	SPLP East	Solid	3010A	516880
500-173686-9	2615V2-AI-B02 (18-24)	SPLP East	Solid	3010A	516880
500-173686-10	2615V2-AI-B02 (24-30)	SPLP East	Solid	3010A	516880
500-173686-11	2615V2-AI-B27 (0-5)	SPLP East	Solid	3010A	516880

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Prep Batch: 517066 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-12	2615V2-AI-B27 (5-10)	SPLP East	Solid	3010A	516880
500-173686-13	2615V2-AI-B27 (5-10)D	SPLP East	Solid	3010A	516880
500-173686-14	2615V2-AI-B27 (10-15)	SPLP East	Solid	3010A	516880
500-173686-15	2615V2-AI-B26 (0-5)	SPLP East	Solid	3010A	516880
500-173686-16	2615V2-AI-B26 (5-10)	SPLP East	Solid	3010A	516880
500-173686-17	2615V2-AI-B26 (10-15)	SPLP East	Solid	3010A	516880
LB 500-516880/1-B	Method Blank	SPLP East	Solid	3010A	516880
LCS 500-517066/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173686-17 MS	2615V2-AI-B26 (10-15)	SPLP East	Solid	3010A	516880
500-173686-17 DU	2615V2-AI-B26 (10-15)	SPLP East	Solid	3010A	516880

Prep Batch: 517068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	TCLP	Solid	3010A	516882
500-173686-2	2615V2-AI-B01 (6-12)	TCLP	Solid	3010A	516882
500-173686-3	2615V2-AI-B01 (12-18)	TCLP	Solid	3010A	516882
500-173686-4	2615V2-AI-B01 (18-24)	TCLP	Solid	3010A	516882
500-173686-5	2615V2-AI-B01 (24-30)	TCLP	Solid	3010A	516882
500-173686-6	2615V2-AI-B02 (0-6)	TCLP	Solid	3010A	516882
500-173686-7	2615V2-AI-B02 (6-12)	TCLP	Solid	3010A	516882
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	3010A	516882
500-173686-9	2615V2-AI-B02 (18-24)	TCLP	Solid	3010A	516882
500-173686-10	2615V2-AI-B02 (24-30)	TCLP	Solid	3010A	516882
500-173686-11	2615V2-AI-B27 (0-5)	TCLP	Solid	3010A	516882
500-173686-12	2615V2-AI-B27 (5-10)	TCLP	Solid	3010A	516882
500-173686-13	2615V2-AI-B27 (5-10)D	TCLP	Solid	3010A	516882
500-173686-14	2615V2-AI-B27 (10-15)	TCLP	Solid	3010A	516882
500-173686-15	2615V2-AI-B26 (0-5)	TCLP	Solid	3010A	516882
500-173686-16	2615V2-AI-B26 (5-10)	TCLP	Solid	3010A	516882
500-173686-17	2615V2-AI-B26 (10-15)	TCLP	Solid	3010A	516882
LB 500-516882/1-B	Method Blank	TCLP	Solid	3010A	516882
LCS 500-517068/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173686-17 MS	2615V2-AI-B26 (10-15)	TCLP	Solid	3010A	516882
500-173686-17 DU	2615V2-AI-B26 (10-15)	TCLP	Solid	3010A	516882

Prep Batch: 517185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	TCLP	Solid	7470A	516882
500-173686-2	2615V2-AI-B01 (6-12)	TCLP	Solid	7470A	516882
500-173686-3	2615V2-AI-B01 (12-18)	TCLP	Solid	7470A	516882
500-173686-4	2615V2-AI-B01 (18-24)	TCLP	Solid	7470A	516882
500-173686-5	2615V2-AI-B01 (24-30)	TCLP	Solid	7470A	516882
500-173686-6	2615V2-AI-B02 (0-6)	TCLP	Solid	7470A	516882
500-173686-7	2615V2-AI-B02 (6-12)	TCLP	Solid	7470A	516882
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	7470A	516882
500-173686-9	2615V2-AI-B02 (18-24)	TCLP	Solid	7470A	516882
500-173686-10	2615V2-AI-B02 (24-30)	TCLP	Solid	7470A	516882
500-173686-11	2615V2-AI-B27 (0-5)	TCLP	Solid	7470A	516882
500-173686-12	2615V2-AI-B27 (5-10)	TCLP	Solid	7470A	516882
500-173686-13	2615V2-AI-B27 (5-10)D	TCLP	Solid	7470A	516882
500-173686-14	2615V2-AI-B27 (10-15)	TCLP	Solid	7470A	516882

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Prep Batch: 517185 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-15	2615V2-AI-B26 (0-5)	TCLP	Solid	7470A	516882
500-173686-16	2615V2-AI-B26 (5-10)	TCLP	Solid	7470A	516882
500-173686-17	2615V2-AI-B26 (10-15)	TCLP	Solid	7470A	516882
LB 500-516882/1-C	Method Blank	TCLP	Solid	7470A	516882
MB 500-517185/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-517185/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-173686-7 MS	2615V2-AI-B02 (6-12)	TCLP	Solid	7470A	516882
500-173686-7 DU	2615V2-AI-B02 (6-12)	TCLP	Solid	7470A	516882

Prep Batch: 517385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	7471B	
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	7471B	
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	7471B	
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	7471B	
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	7471B	
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	7471B	
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	7471B	
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	7471B	
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	7471B	
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	7471B	
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	7471B	
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	7471B	
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	7471B	
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	7471B	
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	7471B	
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	7471B	
MB 500-517385/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-517385/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-173686-10 MS	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	
500-173686-10 MSD	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	
500-173686-10 DU	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	

Analysis Batch: 517394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	TCLP	Solid	7470A	517185
500-173686-2	2615V2-AI-B01 (6-12)	TCLP	Solid	7470A	517185
500-173686-3	2615V2-AI-B01 (12-18)	TCLP	Solid	7470A	517185
500-173686-4	2615V2-AI-B01 (18-24)	TCLP	Solid	7470A	517185
500-173686-5	2615V2-AI-B01 (24-30)	TCLP	Solid	7470A	517185
500-173686-6	2615V2-AI-B02 (0-6)	TCLP	Solid	7470A	517185
500-173686-7	2615V2-AI-B02 (6-12)	TCLP	Solid	7470A	517185
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	7470A	517185
500-173686-9	2615V2-AI-B02 (18-24)	TCLP	Solid	7470A	517185
500-173686-10	2615V2-AI-B02 (24-30)	TCLP	Solid	7470A	517185
500-173686-11	2615V2-AI-B27 (0-5)	TCLP	Solid	7470A	517185
500-173686-12	2615V2-AI-B27 (5-10)	TCLP	Solid	7470A	517185
500-173686-13	2615V2-AI-B27 (5-10)D	TCLP	Solid	7470A	517185
500-173686-14	2615V2-AI-B27 (10-15)	TCLP	Solid	7470A	517185
500-173686-15	2615V2-AI-B26 (0-5)	TCLP	Solid	7470A	517185

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Analysis Batch: 517394 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-16	2615V2-AI-B26 (5-10)	TCLP	Solid	7470A	517185
500-173686-17	2615V2-AI-B26 (10-15)	TCLP	Solid	7470A	517185
LB 500-516882/1-C	Method Blank	TCLP	Solid	7470A	517185
MB 500-517185/12-A	Method Blank	Total/NA	Solid	7470A	517185
LCS 500-517185/13-A	Lab Control Sample	Total/NA	Solid	7470A	517185
500-173686-7 MS	2615V2-AI-B02 (6-12)	TCLP	Solid	7470A	517185
500-173686-7 DU	2615V2-AI-B02 (6-12)	TCLP	Solid	7470A	517185

Analysis Batch: 517520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	SPLP East	Solid	6010B	517066
500-173686-2	2615V2-AI-B01 (6-12)	SPLP East	Solid	6010B	517066
500-173686-3	2615V2-AI-B01 (12-18)	SPLP East	Solid	6010B	517066
500-173686-4	2615V2-AI-B01 (18-24)	SPLP East	Solid	6010B	517066
500-173686-5	2615V2-AI-B01 (24-30)	SPLP East	Solid	6010B	517066
500-173686-6	2615V2-AI-B02 (0-6)	SPLP East	Solid	6010B	517066
500-173686-7	2615V2-AI-B02 (6-12)	SPLP East	Solid	6010B	517066
500-173686-8	2615V2-AI-B02 (12-18)	SPLP East	Solid	6010B	517066
500-173686-9	2615V2-AI-B02 (18-24)	SPLP East	Solid	6010B	517066
500-173686-10	2615V2-AI-B02 (24-30)	SPLP East	Solid	6010B	517066
500-173686-11	2615V2-AI-B27 (0-5)	SPLP East	Solid	6010B	517066
500-173686-12	2615V2-AI-B27 (5-10)	SPLP East	Solid	6010B	517066
500-173686-13	2615V2-AI-B27 (5-10)D	SPLP East	Solid	6010B	517066
500-173686-14	2615V2-AI-B27 (10-15)	SPLP East	Solid	6010B	517066
500-173686-15	2615V2-AI-B26 (0-5)	SPLP East	Solid	6010B	517066
500-173686-16	2615V2-AI-B26 (5-10)	SPLP East	Solid	6010B	517066
500-173686-17	2615V2-AI-B26 (10-15)	SPLP East	Solid	6010B	517066
LB 500-516880/1-B	Method Blank	SPLP East	Solid	6010B	517066
LCS 500-517066/2-A	Lab Control Sample	Total/NA	Solid	6010B	517066
500-173686-17 MS	2615V2-AI-B26 (10-15)	SPLP East	Solid	6010B	517066
500-173686-17 DU	2615V2-AI-B26 (10-15)	SPLP East	Solid	6010B	517066

Analysis Batch: 517614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	TCLP	Solid	6020A	517068
500-173686-2	2615V2-AI-B01 (6-12)	TCLP	Solid	6020A	517068
500-173686-3	2615V2-AI-B01 (12-18)	TCLP	Solid	6020A	517068
500-173686-4	2615V2-AI-B01 (18-24)	TCLP	Solid	6020A	517068
500-173686-5	2615V2-AI-B01 (24-30)	TCLP	Solid	6020A	517068
500-173686-6	2615V2-AI-B02 (0-6)	TCLP	Solid	6020A	517068
500-173686-7	2615V2-AI-B02 (6-12)	TCLP	Solid	6020A	517068
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	6020A	517068
500-173686-9	2615V2-AI-B02 (18-24)	TCLP	Solid	6020A	517068
500-173686-10	2615V2-AI-B02 (24-30)	TCLP	Solid	6020A	517068
500-173686-11	2615V2-AI-B27 (0-5)	TCLP	Solid	6020A	517068
500-173686-12	2615V2-AI-B27 (5-10)	TCLP	Solid	6020A	517068
500-173686-13	2615V2-AI-B27 (5-10)D	TCLP	Solid	6020A	517068
500-173686-14	2615V2-AI-B27 (10-15)	TCLP	Solid	6020A	517068
500-173686-15	2615V2-AI-B26 (0-5)	TCLP	Solid	6020A	517068
500-173686-16	2615V2-AI-B26 (5-10)	TCLP	Solid	6020A	517068
500-173686-17	2615V2-AI-B26 (10-15)	TCLP	Solid	6020A	517068

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Analysis Batch: 517614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-516882/1-B	Method Blank	TCLP	Solid	6020A	517068
LCS 500-517068/2-A	Lab Control Sample	Total/NA	Solid	6020A	517068
500-173686-17 MS	2615V2-AI-B26 (10-15)	TCLP	Solid	6020A	517068
500-173686-17 DU	2615V2-AI-B26 (10-15)	TCLP	Solid	6020A	517068

Analysis Batch: 517626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	7471B	517385
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	7471B	517385
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	7471B	517385
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	7471B	517385
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	7471B	517385
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	7471B	517385
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	7471B	517385
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	7471B	517385
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	7471B	517385
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	517385
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	7471B	517385
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	7471B	517385
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	7471B	517385
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	7471B	517385
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	7471B	517385
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	7471B	517385
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	7471B	517385
MB 500-517385/12-A	Method Blank	Total/NA	Solid	7471B	517385
LCS 500-517385/13-A	Lab Control Sample	Total/NA	Solid	7471B	517385
500-173686-10 MS	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	517385
500-173686-10 MSD	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	517385
500-173686-10 DU	2615V2-AI-B02 (24-30)	Total/NA	Solid	7471B	517385

Analysis Batch: 517762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	TCLP	Solid	6010B	517068
500-173686-2	2615V2-AI-B01 (6-12)	TCLP	Solid	6010B	517068
500-173686-3	2615V2-AI-B01 (12-18)	TCLP	Solid	6010B	517068
500-173686-4	2615V2-AI-B01 (18-24)	TCLP	Solid	6010B	517068
500-173686-5	2615V2-AI-B01 (24-30)	TCLP	Solid	6010B	517068
500-173686-6	2615V2-AI-B02 (0-6)	TCLP	Solid	6010B	517068
500-173686-7	2615V2-AI-B02 (6-12)	TCLP	Solid	6010B	517068
500-173686-8	2615V2-AI-B02 (12-18)	TCLP	Solid	6010B	517068
500-173686-9	2615V2-AI-B02 (18-24)	TCLP	Solid	6010B	517068
500-173686-10	2615V2-AI-B02 (24-30)	TCLP	Solid	6010B	517068
500-173686-11	2615V2-AI-B27 (0-5)	TCLP	Solid	6010B	517068
500-173686-12	2615V2-AI-B27 (5-10)	TCLP	Solid	6010B	517068
500-173686-13	2615V2-AI-B27 (5-10)D	TCLP	Solid	6010B	517068
500-173686-14	2615V2-AI-B27 (10-15)	TCLP	Solid	6010B	517068
500-173686-15	2615V2-AI-B26 (0-5)	TCLP	Solid	6010B	517068
500-173686-16	2615V2-AI-B26 (5-10)	TCLP	Solid	6010B	517068
500-173686-17	2615V2-AI-B26 (10-15)	TCLP	Solid	6010B	517068
LB 500-516882/1-B	Method Blank	TCLP	Solid	6010B	517068
LCS 500-517068/2-A	Lab Control Sample	Total/NA	Solid	6010B	517068

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Analysis Batch: 517762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-17 MS	2615V2-AI-B26 (10-15)	TCLP	Solid	6010B	517068
500-173686-17 DU	2615V2-AI-B26 (10-15)	TCLP	Solid	6010B	517068

Prep Batch: 518168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	3050B	
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	3050B	
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	3050B	
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	3050B	
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	3050B	
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	3050B	
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	3050B	
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	3050B	
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	3050B	
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	3050B	
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	3050B	
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	3050B	
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	3050B	
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	3050B	
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	3050B	
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	3050B	
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	3050B	
MB 500-518168/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518168/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-173686-1 MS	2615V2-AI-B01 (0-6)	Total/NA	Solid	3050B	
500-173686-1 MSD	2615V2-AI-B01 (0-6)	Total/NA	Solid	3050B	
500-173686-1 DU	2615V2-AI-B01 (0-6)	Total/NA	Solid	3050B	

Analysis Batch: 518550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	6010B	518168
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	6010B	518168
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	6010B	518168
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	6010B	518168
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	6010B	518168
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	6010B	518168
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	6010B	518168
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	6010B	518168
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	6010B	518168
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	6010B	518168
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	6010B	518168
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	6010B	518168
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	6010B	518168
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	6010B	518168
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	6010B	518168
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	6010B	518168
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	6010B	518168
MB 500-518168/1-A	Method Blank	Total/NA	Solid	6010B	518168
LCS 500-518168/2-A	Lab Control Sample	Total/NA	Solid	6010B	518168
500-173686-1 MS	2615V2-AI-B01 (0-6)	Total/NA	Solid	6010B	518168
500-173686-1 MSD	2615V2-AI-B01 (0-6)	Total/NA	Solid	6010B	518168

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Metals (Continued)

Analysis Batch: 518550 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1 DU	2615V2-AI-B01 (0-6)	Total/NA	Solid	6010B	518168

Analysis Batch: 518695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	6010B	518168
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	6010B	518168
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	6010B	518168
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	6010B	518168
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	6010B	518168
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	6010B	518168
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	6010B	518168
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	6010B	518168
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	6010B	518168
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	6010B	518168
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	6010B	518168
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	6010B	518168
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	6010B	518168
MB 500-518168/1-A	Method Blank	Total/NA	Solid	6010B	518168
LCS 500-518168/2-A	Lab Control Sample	Total/NA	Solid	6010B	518168

General Chemistry

Analysis Batch: 516816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	Moisture	
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	Moisture	
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	Moisture	
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	Moisture	
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	Moisture	
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	Moisture	
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	Moisture	
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	Moisture	
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	Moisture	
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	Moisture	
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	Moisture	
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	Moisture	
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	Moisture	
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	Moisture	
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	Moisture	
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	Moisture	
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	Moisture	
500-173686-2 DU	2615V2-AI-B01 (6-12)	Total/NA	Solid	Moisture	

Analysis Batch: 517162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-1	2615V2-AI-B01 (0-6)	Total/NA	Solid	9045D	
500-173686-2	2615V2-AI-B01 (6-12)	Total/NA	Solid	9045D	
500-173686-3	2615V2-AI-B01 (12-18)	Total/NA	Solid	9045D	
500-173686-4	2615V2-AI-B01 (18-24)	Total/NA	Solid	9045D	
500-173686-5	2615V2-AI-B01 (24-30)	Total/NA	Solid	9045D	
500-173686-6	2615V2-AI-B02 (0-6)	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

General Chemistry (Continued)

Analysis Batch: 517162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-7	2615V2-AI-B02 (6-12)	Total/NA	Solid	9045D	
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	9045D	
500-173686-9	2615V2-AI-B02 (18-24)	Total/NA	Solid	9045D	
500-173686-10	2615V2-AI-B02 (24-30)	Total/NA	Solid	9045D	
500-173686-11	2615V2-AI-B27 (0-5)	Total/NA	Solid	9045D	
500-173686-12	2615V2-AI-B27 (5-10)	Total/NA	Solid	9045D	
500-173686-13	2615V2-AI-B27 (5-10)D	Total/NA	Solid	9045D	
500-173686-14	2615V2-AI-B27 (10-15)	Total/NA	Solid	9045D	
500-173686-15	2615V2-AI-B26 (0-5)	Total/NA	Solid	9045D	
500-173686-16	2615V2-AI-B26 (5-10)	Total/NA	Solid	9045D	
500-173686-17	2615V2-AI-B26 (10-15)	Total/NA	Solid	9045D	
LCS 500-517162/5	Lab Control Sample	Total/NA	Solid	9045D	
LCS 500-517162/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173686-9 DU	2615V2-AI-B02 (18-24)	Total/NA	Solid	9045D	

Prep Batch: 517594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	9010B	
MB 500-517594/1-A	Method Blank	Total/NA	Solid	9010B	
HLCS 500-517594/2-A	Lab Control Sample	Total/NA	Solid	9010B	
LCS 500-517594/3-A	Lab Control Sample	Total/NA	Solid	9010B	
LLCS 500-517594/4-A	Lab Control Sample	Total/NA	Solid	9010B	
500-173686-8 MS	2615V2-AI-B02 (12-18)	Total/NA	Solid	9010B	
500-173686-8 MSD	2615V2-AI-B02 (12-18)	Total/NA	Solid	9010B	

Analysis Batch: 517714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	9014	517594
MB 500-517594/1-A	Method Blank	Total/NA	Solid	9014	517594
HLCS 500-517594/2-A	Lab Control Sample	Total/NA	Solid	9014	517594
LCS 500-517594/3-A	Lab Control Sample	Total/NA	Solid	9014	517594
LLCS 500-517594/4-A	Lab Control Sample	Total/NA	Solid	9014	517594
500-173686-8 MS	2615V2-AI-B02 (12-18)	Total/NA	Solid	9014	517594
500-173686-8 MSD	2615V2-AI-B02 (12-18)	Total/NA	Solid	9014	517594

Prep Batch: 517732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	7.3.4	
MB 500-517732/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 500-517732/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
500-173686-8 MS	2615V2-AI-B02 (12-18)	Total/NA	Solid	7.3.4	
500-173686-8 MSD	2615V2-AI-B02 (12-18)	Total/NA	Solid	7.3.4	

Analysis Batch: 517735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	7.3.4	517732
MB 500-517732/1-A	Method Blank	Total/NA	Solid	7.3.4	517732
LCS 500-517732/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	517732
500-173686-8 MS	2615V2-AI-B02 (12-18)	Total/NA	Solid	7.3.4	517732
500-173686-8 MSD	2615V2-AI-B02 (12-18)	Total/NA	Solid	7.3.4	517732

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

General Chemistry

Analysis Batch: 518267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	9095A	

Analysis Batch: 518722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173686-8	2615V2-AI-B02 (12-18)	Total/NA	Solid	1010A	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - TCLP Volatiles

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
LCS 500-517534/4	Lab Control Sample	106	95	101	106
MB 500-517534/6	Method Blank	108	99	105	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - TCLP Volatiles

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-173686-8	2615V2-AI-B02 (12-18)	97	103	111	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-173686-1	2615V2-AI-B01 (0-6)	100	118	92	98
500-173686-2	2615V2-AI-B01 (6-12)	96	108	95	96
500-173686-3	2615V2-AI-B01 (12-18)	92	104	90	96
500-173686-4	2615V2-AI-B01 (18-24)	94	106	90	97
500-173686-5	2615V2-AI-B01 (24-30)	96	103	93	95
500-173686-6	2615V2-AI-B02 (0-6)	98	107	94	95
500-173686-7	2615V2-AI-B02 (6-12)	97	106	93	94
500-173686-8	2615V2-AI-B02 (12-18)	95	105	94	96
500-173686-9	2615V2-AI-B02 (18-24)	97	104	93	96
500-173686-10	2615V2-AI-B02 (24-30)	96	103	93	94
500-173686-11	2615V2-AI-B27 (0-5)	96	106	94	93
500-173686-12	2615V2-AI-B27 (5-10)	97	103	92	95
500-173686-13	2615V2-AI-B27 (5-10)D	96	100	93	95
500-173686-14	2615V2-AI-B27 (10-15)	93	100	92	93
500-173686-15	2615V2-AI-B26 (0-5)	97	107	94	95
500-173686-16	2615V2-AI-B26 (5-10)	96	101	95	94
500-173686-17	2615V2-AI-B26 (10-15)	92	100	92	93
LCS 500-517969/7	Lab Control Sample	90	95	87	94
LCS 500-518015/4	Lab Control Sample	89	94	89	94
LCSD 500-517969/8	Lab Control Sample Dup	87	95	88	94
LCSD 500-518015/5	Lab Control Sample Dup	90	96	89	95
MB 500-517969/6	Method Blank	90	102	86	93

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
MB 500-518015/7	Method Blank	90	99	89	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173686-1	2615V2-AI-B01 (0-6)	120	115	94	90	69	102
500-173686-1 MS	2615V2-AI-B01 (0-6)	124	125	106	90	59	97
500-173686-1 MSD	2615V2-AI-B01 (0-6)	141	139	111	97	65	103
500-173686-2	2615V2-AI-B01 (6-12)	130	121	102	96	46	104
500-173686-3	2615V2-AI-B01 (12-18)	120	112	94	91	49	95
500-173686-4	2615V2-AI-B01 (18-24)	132	121	97	93	47	100
500-173686-5	2615V2-AI-B01 (24-30)	129	123	99	94	53	101
500-173686-6	2615V2-AI-B02 (0-6)	121	123	96	94	55	104
500-173686-7	2615V2-AI-B02 (6-12)	112	106	85	84	48	97
500-173686-8	2615V2-AI-B02 (12-18)	120	122	94	90	50	101
500-173686-9	2615V2-AI-B02 (18-24)	65	64	70	89	42	104
500-173686-10	2615V2-AI-B02 (24-30)	65	66	76	97	32	98
500-173686-11	2615V2-AI-B27 (0-5)	73	70	79	97	40	108
500-173686-12	2615V2-AI-B27 (5-10)	72	71	86	100	35	105
500-173686-13	2615V2-AI-B27 (5-10)D	70	70	79	97	42	107
500-173686-14	2615V2-AI-B27 (10-15)	64	66	78	97	29 X	101
500-173686-15	2615V2-AI-B26 (0-5)	69	67	78	95	45	103
500-173686-16	2615V2-AI-B26 (5-10)	60	62	67	89	29 X	100
500-173686-17	2615V2-AI-B26 (10-15)	65	65	69	87	30 X	97
LCS 500-517923/2-A	Lab Control Sample	126	118	100	94	84	93
MB 500-517923/1-A	Method Blank	128	114	100	94	73	100

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (27-110)	PHL (20-100)	NBZ (36-120)	FBP (34-110)	TBP (40-145)	TPHL (40-145)
LCS 500-517214/2-A	Lab Control Sample	69	48	90	103	106	110
MB 500-517214/1-A	Method Blank	68	39	89	108	89	131

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPHL (40-145)	TBP (40-145)
500-173686-8	2615V2-AI-B02 (12-18)	94	60	83	38	119	86
500-173686-8 MS	2615V2-AI-B02 (12-18)	93	56	82	38	98	95
LB 500-516882/1-D	Method Blank	104	65	92	38	131	98

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1 (30-130)	TCX1 (30-120)
LCS 500-517422/2-A	Lab Control Sample	96	92
LCS 500-517422/3-A	Lab Control Sample	98	91
MB 500-517422/1-A	Method Blank	92	86

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1 (30-130)	TCX1 (30-120)
500-173686-8	2615V2-AI-B02 (12-18)	100	98
500-173686-8 MS	2615V2-AI-B02 (12-18)	109	103
500-173686-8 MS	2615V2-AI-B02 (12-18)	100	93
LB 500-516882/1-F	Method Blank	98	95

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (37-121)	TCX1 (49-129)
500-173686-8	2615V2-AI-B02 (12-18)	85	83
LCS 500-517271/2-A	Lab Control Sample	79	89
MB 500-517271/1-A	Method Blank	69	78

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (25-130)
LCS 500-517382/2-A	Lab Control Sample	105
MB 500-517382/1-A	Method Blank	100

Surrogate Legend

DCPAA = DCAA

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (25-130)
500-173686-8	2615V2-AI-B02 (12-18)	113
LB 500-516882/1-E	Method Blank	91

Surrogate Legend

DCPAA = DCAA

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - TCLP Volatiles

Lab Sample ID: MB 500-517534/6
Matrix: Solid
Analysis Batch: 517534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
1,1-Dichloroethene	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0025	mg/L			11/27/19 11:31	1
Benzene	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
Carbon tetrachloride	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
Chlorobenzene	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
Chloroform	<0.0020		0.0020	0.0010	mg/L			11/27/19 11:31	1
Tetrachloroethene	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
Trichloroethene	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1
Vinyl chloride	<0.0010		0.0010	0.00050	mg/L			11/27/19 11:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		11/27/19 11:31	1
4-Bromofluorobenzene (Surr)	99		72 - 124		11/27/19 11:31	1
Dibromofluoromethane	105		75 - 120		11/27/19 11:31	1
Toluene-d8 (Surr)	105		75 - 120		11/27/19 11:31	1

Lab Sample ID: LCS 500-517534/4
Matrix: Solid
Analysis Batch: 517534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0507		mg/L		101	68 - 127
1,1-Dichloroethene	0.0500	0.0503		mg/L		101	67 - 122
Methyl Ethyl Ketone	0.0500	0.0511		mg/L		102	46 - 144
Benzene	0.0500	0.0490		mg/L		98	70 - 120
Carbon tetrachloride	0.0500	0.0473		mg/L		95	59 - 133
Chlorobenzene	0.0500	0.0456		mg/L		91	70 - 120
Chloroform	0.0500	0.0469		mg/L		94	70 - 120
Tetrachloroethene	0.0500	0.0492		mg/L		98	70 - 128
Trichloroethene	0.0500	0.0474		mg/L		95	70 - 125
Vinyl chloride	0.0500	0.0555		mg/L		111	64 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		75 - 126
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	106		75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-517969/6
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/30/19 09:16	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/30/19 09:16	1

Euromins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-517969/6
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/30/19 09:16	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/30/19 09:16	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/30/19 09:16	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/30/19 09:16	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/30/19 09:16	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/30/19 09:16	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/30/19 09:16	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/30/19 09:16	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/30/19 09:16	1
Acetone	<0.020		0.020	0.0087	mg/Kg			11/30/19 09:16	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/30/19 09:16	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/30/19 09:16	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/30/19 09:16	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/30/19 09:16	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/30/19 09:16	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/30/19 09:16	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/30/19 09:16	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/30/19 09:16	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/30/19 09:16	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/30/19 09:16	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/30/19 09:16	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/30/19 09:16	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/30/19 09:16	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/30/19 09:16	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/30/19 09:16	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/30/19 09:16	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/30/19 09:16	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/30/19 09:16	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/30/19 09:16	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/30/19 09:16	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/30/19 09:16	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/30/19 09:16	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/30/19 09:16	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/30/19 09:16	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/30/19 09:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		11/30/19 09:16	1
4-Bromofluorobenzene (Surr)	102		75 - 131		11/30/19 09:16	1
Dibromofluoromethane	86		75 - 126		11/30/19 09:16	1
Toluene-d8 (Surr)	93		75 - 124		11/30/19 09:16	1

Lab Sample ID: LCS 500-517969/7
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0456		mg/Kg		91	70 - 128

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517969/7
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	0.0500	0.0464		mg/Kg		93	70 - 122
1,1,2-Trichloroethane	0.0500	0.0482		mg/Kg		96	70 - 125
1,1-Dichloroethane	0.0500	0.0446		mg/Kg		89	70 - 125
1,2-Dichloroethane	0.0500	0.0470		mg/Kg		94	70 - 130
1,2-Dichloropropane	0.0500	0.0458		mg/Kg		92	70 - 125
1,1-Dichloroethene	0.0500	0.0466		mg/Kg		93	70 - 120
2-Butanone (MEK)	0.0500	0.0458		mg/Kg		92	47 - 138
2-Hexanone	0.0500	0.0463		mg/Kg		93	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0433		mg/Kg		87	50 - 148
Acetone	0.0500	0.0482		mg/Kg		96	40 - 150
Benzene	0.0500	0.0473		mg/Kg		95	70 - 125
Bromodichloromethane	0.0500	0.0455		mg/Kg		91	67 - 129
Bromoform	0.0500	0.0419		mg/Kg		84	68 - 136
Bromomethane	0.0500	0.0442		mg/Kg		88	70 - 130
Carbon disulfide	0.0500	0.0447		mg/Kg		89	70 - 129
Carbon tetrachloride	0.0500	0.0465		mg/Kg		93	75 - 125
Chlorobenzene	0.0500	0.0481		mg/Kg		96	50 - 150
Chloroethane	0.0500	0.0436		mg/Kg		87	75 - 125
Chloroform	0.0500	0.0441		mg/Kg		88	57 - 135
Chloromethane	0.0500	0.0414		mg/Kg		83	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0447		mg/Kg		89	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0468		mg/Kg		94	70 - 125
Dibromochloromethane	0.0500	0.0440		mg/Kg		88	69 - 125
Ethylbenzene	0.0500	0.0466		mg/Kg		93	61 - 136
Methyl tert-butyl ether	0.0500	0.0472		mg/Kg		94	50 - 140
Methylene Chloride	0.0500	0.0447		mg/Kg		89	70 - 126
Styrene	0.0500	0.0459		mg/Kg		92	70 - 125
Tetrachloroethene	0.0500	0.0480		mg/Kg		96	70 - 124
Toluene	0.0500	0.0474		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0454		mg/Kg		91	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0472		mg/Kg		94	70 - 125
Trichloroethene	0.0500	0.0482		mg/Kg		96	70 - 125
Vinyl acetate	0.0500	0.0350		mg/Kg		70	40 - 153
Vinyl chloride	0.0500	0.0435		mg/Kg		87	70 - 125
Xylenes, Total	0.100	0.0932		mg/Kg		93	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
4-Bromofluorobenzene (Surr)	95		75 - 131
Dibromofluoromethane	87		75 - 126
Toluene-d8 (Surr)	94		75 - 124

Lab Sample ID: LCSD 500-517969/8
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 128	3	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-517969/8
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	0.0500	0.0423		mg/Kg		85	70 - 122	9	30
1,1,2-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 125	9	30
1,1-Dichloroethane	0.0500	0.0426		mg/Kg		85	70 - 125	4	30
1,2-Dichloroethane	0.0500	0.0441		mg/Kg		88	70 - 130	6	30
1,2-Dichloropropane	0.0500	0.0447		mg/Kg		89	70 - 125	2	30
1,1-Dichloroethene	0.0500	0.0463		mg/Kg		93	70 - 120	1	30
2-Butanone (MEK)	0.0500	0.0420		mg/Kg		84	47 - 138	9	30
2-Hexanone	0.0500	0.0414		mg/Kg		83	48 - 146	11	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0390		mg/Kg		78	50 - 148	10	30
Acetone	0.0500	0.0487		mg/Kg		97	40 - 150	1	30
Benzene	0.0500	0.0445		mg/Kg		89	70 - 125	6	30
Bromodichloromethane	0.0500	0.0432		mg/Kg		86	67 - 129	5	30
Bromoform	0.0500	0.0380		mg/Kg		76	68 - 136	10	30
Bromomethane	0.0500	0.0471		mg/Kg		94	70 - 130	6	30
Carbon disulfide	0.0500	0.0442		mg/Kg		88	70 - 129	1	30
Carbon tetrachloride	0.0500	0.0445		mg/Kg		89	75 - 125	4	30
Chlorobenzene	0.0500	0.0463		mg/Kg		93	50 - 150	4	30
Chloroethane	0.0500	0.0466		mg/Kg		93	75 - 125	7	30
Chloroform	0.0500	0.0424		mg/Kg		85	57 - 135	4	30
Chloromethane	0.0500	0.0444		mg/Kg		89	70 - 125	7	30
cis-1,2-Dichloroethene	0.0500	0.0430		mg/Kg		86	70 - 125	4	30
cis-1,3-Dichloropropene	0.0500	0.0440		mg/Kg		88	70 - 125	6	30
Dibromochloromethane	0.0500	0.0406		mg/Kg		81	69 - 125	8	30
Ethylbenzene	0.0500	0.0449		mg/Kg		90	61 - 136	4	30
Methyl tert-butyl ether	0.0500	0.0432		mg/Kg		86	50 - 140	9	30
Methylene Chloride	0.0500	0.0427		mg/Kg		85	70 - 126	5	30
Styrene	0.0500	0.0443		mg/Kg		89	70 - 125	4	30
Tetrachloroethene	0.0500	0.0460		mg/Kg		92	70 - 124	4	30
Toluene	0.0500	0.0454		mg/Kg		91	70 - 125	4	30
trans-1,2-Dichloroethene	0.0500	0.0438		mg/Kg		88	70 - 125	4	30
trans-1,3-Dichloropropene	0.0500	0.0443		mg/Kg		89	70 - 125	6	30
Trichloroethene	0.0500	0.0458		mg/Kg		92	70 - 125	5	30
Vinyl acetate	0.0500	0.0331		mg/Kg		66	40 - 153	6	30
Vinyl chloride	0.0500	0.0471		mg/Kg		94	70 - 125	8	30
Xylenes, Total	0.100	0.0900		mg/Kg		90	53 - 147	4	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	87		70 - 134
4-Bromofluorobenzene (Surr)	95		75 - 131
Dibromofluoromethane	88		75 - 126
Toluene-d8 (Surr)	94		75 - 124

Lab Sample ID: MB 500-518015/7
Matrix: Solid
Analysis Batch: 518015

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/01/19 13:00	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518015/7
Matrix: Solid
Analysis Batch: 518015

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/01/19 13:00	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/01/19 13:00	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/01/19 13:00	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/01/19 13:00	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/01/19 13:00	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/01/19 13:00	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/01/19 13:00	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/01/19 13:00	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/01/19 13:00	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/01/19 13:00	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/01/19 13:00	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/01/19 13:00	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/01/19 13:00	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/01/19 13:00	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/01/19 13:00	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/01/19 13:00	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/01/19 13:00	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/01/19 13:00	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/01/19 13:00	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/01/19 13:00	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/01/19 13:00	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/01/19 13:00	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/01/19 13:00	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/01/19 13:00	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/01/19 13:00	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/01/19 13:00	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/01/19 13:00	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/01/19 13:00	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/01/19 13:00	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/01/19 13:00	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/01/19 13:00	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/01/19 13:00	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/01/19 13:00	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/01/19 13:00	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/01/19 13:00	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/01/19 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/01/19 13:00	1
4-Bromofluorobenzene (Surr)	99		75 - 131		12/01/19 13:00	1
Dibromofluoromethane	89		75 - 126		12/01/19 13:00	1
Toluene-d8 (Surr)	92		75 - 124		12/01/19 13:00	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518015/4

Matrix: Solid

Analysis Batch: 518015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0459		mg/Kg		92	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0444		mg/Kg		89	70 - 122
1,1,2-Trichloroethane	0.0500	0.0469		mg/Kg		94	70 - 125
1,1-Dichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125
1,2-Dichloroethane	0.0500	0.0472		mg/Kg		94	70 - 130
1,2-Dichloropropane	0.0500	0.0469		mg/Kg		94	70 - 125
1,1-Dichloroethene	0.0500	0.0464		mg/Kg		93	70 - 120
2-Butanone (MEK)	0.0500	0.0451		mg/Kg		90	47 - 138
2-Hexanone	0.0500	0.0438		mg/Kg		88	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0417		mg/Kg		83	50 - 148
Acetone	0.0500	0.0561		mg/Kg		112	40 - 150
Benzene	0.0500	0.0464		mg/Kg		93	70 - 125
Bromodichloromethane	0.0500	0.0461		mg/Kg		92	67 - 129
Bromoform	0.0500	0.0419		mg/Kg		84	68 - 136
Bromomethane	0.0500	0.0499		mg/Kg		100	70 - 130
Carbon disulfide	0.0500	0.0448		mg/Kg		90	70 - 129
Carbon tetrachloride	0.0500	0.0459		mg/Kg		92	75 - 125
Chlorobenzene	0.0500	0.0479		mg/Kg		96	50 - 150
Chloroethane	0.0500	0.0502		mg/Kg		100	75 - 125
Chloroform	0.0500	0.0448		mg/Kg		90	57 - 135
Chloromethane	0.0500	0.0425		mg/Kg		85	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0452		mg/Kg		90	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0458		mg/Kg		92	70 - 125
Dibromochloromethane	0.0500	0.0431		mg/Kg		86	69 - 125
Ethylbenzene	0.0500	0.0458		mg/Kg		92	61 - 136
Methyl tert-butyl ether	0.0500	0.0465		mg/Kg		93	50 - 140
Methylene Chloride	0.0500	0.0446		mg/Kg		89	70 - 126
Styrene	0.0500	0.0464		mg/Kg		93	70 - 125
Tetrachloroethene	0.0500	0.0466		mg/Kg		93	70 - 124
Toluene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0456		mg/Kg		91	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0455		mg/Kg		91	70 - 125
Trichloroethene	0.0500	0.0484		mg/Kg		97	70 - 125
Vinyl acetate	0.0500	0.0341		mg/Kg		68	40 - 153
Vinyl chloride	0.0500	0.0444		mg/Kg		89	70 - 125
Xylenes, Total	0.100	0.0931		mg/Kg		93	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	89		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-518015/5

Matrix: Solid

Analysis Batch: 518015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0447		mg/Kg		89	70 - 128	3	30
1,1,2,2-Tetrachloroethane	0.0500	0.0436		mg/Kg		87	70 - 122	2	30
1,1,2-Trichloroethane	0.0500	0.0456		mg/Kg		91	70 - 125	3	30
1,1-Dichloroethane	0.0500	0.0440		mg/Kg		88	70 - 125	2	30
1,2-Dichloroethane	0.0500	0.0455		mg/Kg		91	70 - 130	4	30
1,2-Dichloropropane	0.0500	0.0462		mg/Kg		92	70 - 125	1	30
1,1-Dichloroethene	0.0500	0.0453		mg/Kg		91	70 - 120	2	30
2-Butanone (MEK)	0.0500	0.0416		mg/Kg		83	47 - 138	8	30
2-Hexanone	0.0500	0.0421		mg/Kg		84	48 - 146	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0411		mg/Kg		82	50 - 148	1	30
Acetone	0.0500	0.0690		mg/Kg		138	40 - 150	21	30
Benzene	0.0500	0.0457		mg/Kg		91	70 - 125	2	30
Bromodichloromethane	0.0500	0.0451		mg/Kg		90	67 - 129	2	30
Bromoform	0.0500	0.0404		mg/Kg		81	68 - 136	4	30
Bromomethane	0.0500	0.0466		mg/Kg		93	70 - 130	7	30
Carbon disulfide	0.0500	0.0432		mg/Kg		86	70 - 129	4	30
Carbon tetrachloride	0.0500	0.0454		mg/Kg		91	75 - 125	1	30
Chlorobenzene	0.0500	0.0471		mg/Kg		94	50 - 150	2	30
Chloroethane	0.0500	0.0470		mg/Kg		94	75 - 125	6	30
Chloroform	0.0500	0.0437		mg/Kg		87	57 - 135	2	30
Chloromethane	0.0500	0.0400		mg/Kg		80	70 - 125	6	30
cis-1,2-Dichloroethene	0.0500	0.0441		mg/Kg		88	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0447		mg/Kg		89	70 - 125	2	30
Dibromochloromethane	0.0500	0.0425		mg/Kg		85	69 - 125	1	30
Ethylbenzene	0.0500	0.0452		mg/Kg		90	61 - 136	1	30
Methyl tert-butyl ether	0.0500	0.0447		mg/Kg		89	50 - 140	4	30
Methylene Chloride	0.0500	0.0430		mg/Kg		86	70 - 126	4	30
Styrene	0.0500	0.0445		mg/Kg		89	70 - 125	4	30
Tetrachloroethene	0.0500	0.0458		mg/Kg		92	70 - 124	2	30
Toluene	0.0500	0.0460		mg/Kg		92	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0449		mg/Kg		90	70 - 125	2	30
trans-1,3-Dichloropropene	0.0500	0.0446		mg/Kg		89	70 - 125	2	30
Trichloroethene	0.0500	0.0466		mg/Kg		93	70 - 125	4	30
Vinyl acetate	0.0500	0.0342		mg/Kg		68	40 - 153	0	30
Vinyl chloride	0.0500	0.0415		mg/Kg		83	70 - 125	7	30
Xylenes, Total	0.100	0.0908		mg/Kg		91	53 - 147	2	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	89		75 - 126
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-517214/1-A
Matrix: Solid
Analysis Batch: 517259

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0020		0.0020	0.0020	mg/L		11/25/19 11:48	11/26/19 02:24	1
Cresol, o-	<0.0020		0.0020	0.0020	mg/L		11/25/19 11:48	11/26/19 02:24	1
Hexachloroethane	<0.0050		0.0050	0.0050	mg/L		11/25/19 11:48	11/26/19 02:24	1
Nitrobenzene	<0.0010		0.0010	0.0010	mg/L		11/25/19 11:48	11/26/19 02:24	1
Pyridine	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 02:24	1
Hexachloro-1,3-butadiene	<0.0050		0.0050	0.0050	mg/L		11/25/19 11:48	11/26/19 02:24	1
2,4,6-Trichlorophenol	<0.0050		0.0050	0.0050	mg/L		11/25/19 11:48	11/26/19 02:24	1
2,4,5-Trichlorophenol	<0.010		0.010	0.010	mg/L		11/25/19 11:48	11/26/19 02:24	1
2,4-Dinitrotoluene	<0.0010		0.0010	0.0010	mg/L		11/25/19 11:48	11/26/19 02:24	1
Hexachlorobenzene	<0.00050		0.00050	0.00050	mg/L		11/25/19 11:48	11/26/19 02:24	1
Pentachlorophenol	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 02:24	1
m & p - Cresol	<0.0020		0.0020	0.0020	mg/L		11/25/19 11:48	11/26/19 02:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		27 - 110	11/25/19 11:48	11/26/19 02:24	1
Phenol-d5	39		20 - 100	11/25/19 11:48	11/26/19 02:24	1
Nitrobenzene-d5	89		36 - 120	11/25/19 11:48	11/26/19 02:24	1
2-Fluorobiphenyl	108		34 - 110	11/25/19 11:48	11/26/19 02:24	1
2,4,6-Tribromophenol	89		40 - 145	11/25/19 11:48	11/26/19 02:24	1
Terphenyl-d14	131		40 - 145	11/25/19 11:48	11/26/19 02:24	1

Lab Sample ID: LCS 500-517214/2-A
Matrix: Solid
Analysis Batch: 517259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,4-Dichlorobenzene	0.0400	0.0348		mg/L		87	23 - 110
Cresol, o-	0.0400	0.0377		mg/L		94	53 - 115
Hexachloroethane	0.0400	0.0342		mg/L		86	20 - 100
Nitrobenzene	0.0400	0.0390		mg/L		98	54 - 121
Pyridine	0.0800	0.0396		mg/L		50	15 - 110
Hexachloro-1,3-butadiene	0.0400	0.0336		mg/L		84	20 - 100
2,4,6-Trichlorophenol	0.0400	0.0439		mg/L		110	62 - 121
2,4,5-Trichlorophenol	0.0400	0.0452		mg/L		113	63 - 124
2,4-Dinitrotoluene	0.0400	0.0429		mg/L		107	63 - 129
Hexachlorobenzene	0.0400	0.0408		mg/L		102	61 - 126
Pentachlorophenol	0.0800	0.0673		mg/L		84	42 - 148
m & p - Cresol	0.0400	0.0362		mg/L		91	50 - 116

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	69		27 - 110
Phenol-d5	48		20 - 100
Nitrobenzene-d5	90		36 - 120
2-Fluorobiphenyl	103		34 - 110
2,4,6-Tribromophenol	106		40 - 145
Terphenyl-d14	110		40 - 145

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-517923/1-A

Matrix: Solid

Analysis Batch: 518079

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 517923

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/29/19 16:14	12/02/19 11:54	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-517923/1-A
Matrix: Solid
Analysis Batch: 518079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517923

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/29/19 16:14	12/02/19 11:54	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/29/19 16:14	12/02/19 11:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	128		31 - 166	11/29/19 16:14	12/02/19 11:54	1
Phenol-d5	114		30 - 153	11/29/19 16:14	12/02/19 11:54	1
Nitrobenzene-d5	100		37 - 147	11/29/19 16:14	12/02/19 11:54	1
2-Fluorobiphenyl	94		43 - 145	11/29/19 16:14	12/02/19 11:54	1
2,4,6-Tribromophenol	73		31 - 143	11/29/19 16:14	12/02/19 11:54	1
Terphenyl-d14	100		42 - 157	11/29/19 16:14	12/02/19 11:54	1

Lab Sample ID: LCS 500-517923/2-A
Matrix: Solid
Analysis Batch: 518079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517923

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Phenol	1.33	1.79	*	mg/Kg		134	56 - 122
Bis(2-chloroethyl)ether	1.33	1.43		mg/Kg		107	55 - 111
1,3-Dichlorobenzene	1.33	1.27		mg/Kg		95	65 - 124
1,4-Dichlorobenzene	1.33	1.28		mg/Kg		96	61 - 110
1,2-Dichlorobenzene	1.33	1.28		mg/Kg		96	62 - 110
2-Methylphenol	1.33	1.67	*	mg/Kg		126	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.92	*	mg/Kg		144	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.59	*	mg/Kg		119	56 - 118
Hexachloroethane	1.33	1.39		mg/Kg		104	60 - 114
2-Chlorophenol	1.33	1.40		mg/Kg		105	64 - 110
Nitrobenzene	1.33	1.60	*	mg/Kg		120	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.50		mg/Kg		112	60 - 112
1,2,4-Trichlorobenzene	1.33	1.27		mg/Kg		95	66 - 117
Isophorone	1.33	1.58	*	mg/Kg		119	55 - 110
2,4-Dimethylphenol	1.33	1.32		mg/Kg		99	60 - 110
Hexachlorobutadiene	1.33	1.24		mg/Kg		93	56 - 120
Naphthalene	1.33	1.35		mg/Kg		101	63 - 110
2,4-Dichlorophenol	1.33	1.30		mg/Kg		98	58 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517923/2-A

Matrix: Solid

Analysis Batch: 518079

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 517923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.28		mg/Kg		96	30 - 150
2,4,6-Trichlorophenol	1.33	1.21		mg/Kg		91	57 - 120
2,4,5-Trichlorophenol	1.33	1.22		mg/Kg		91	50 - 120
Hexachlorocyclopentadiene	1.33	0.448	J	mg/Kg		34	10 - 133
2-Methylnaphthalene	1.33	1.35		mg/Kg		101	69 - 112
2-Nitroaniline	1.33	1.61		mg/Kg		121	57 - 124
2-Chloronaphthalene	1.33	1.34		mg/Kg		101	69 - 114
4-Chloro-3-methylphenol	1.33	1.37		mg/Kg		103	65 - 122
2,6-Dinitrotoluene	1.33	1.38		mg/Kg		103	70 - 123
2-Nitrophenol	1.33	1.30		mg/Kg		97	60 - 120
3-Nitroaniline	1.33	1.14		mg/Kg		86	40 - 122
Dimethyl phthalate	1.33	1.36		mg/Kg		102	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		8	10 - 100
Acenaphthylene	1.33	1.37		mg/Kg		102	68 - 120
2,4-Dinitrotoluene	1.33	1.42		mg/Kg		106	69 - 124
Acenaphthene	1.33	1.34		mg/Kg		100	65 - 124
Dibenzofuran	1.33	1.35		mg/Kg		102	66 - 115
4-Nitrophenol	2.67	2.49		mg/Kg		93	30 - 122
Fluorene	1.33	1.35		mg/Kg		102	62 - 120
4-Nitroaniline	1.33	1.20		mg/Kg		90	60 - 160
4-Bromophenyl phenyl ether	1.33	1.26		mg/Kg		95	68 - 118
Hexachlorobenzene	1.33	1.26		mg/Kg		95	63 - 124
Diethyl phthalate	1.33	1.38		mg/Kg		104	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.27		mg/Kg		96	62 - 119
Pentachlorophenol	2.67	1.29		mg/Kg		48	13 - 112
N-Nitrosodiphenylamine	1.33	1.39		mg/Kg		104	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.639	J	mg/Kg		24	10 - 110
Phenanthrene	1.33	1.34		mg/Kg		100	62 - 120
Anthracene	1.33	1.38		mg/Kg		104	70 - 114
Carbazole	1.33	1.39		mg/Kg		104	65 - 142
Di-n-butyl phthalate	1.33	1.46		mg/Kg		110	65 - 120
Fluoranthene	1.33	1.31		mg/Kg		99	62 - 120
Pyrene	1.33	1.42		mg/Kg		106	61 - 128
Butyl benzyl phthalate	1.33	1.50		mg/Kg		113	71 - 129
Benzo[a]anthracene	1.33	1.28		mg/Kg		96	67 - 122
Chrysene	1.33	1.27		mg/Kg		95	63 - 120
3,3'-Dichlorobenzidine	1.33	0.978		mg/Kg		73	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.49		mg/Kg		112	72 - 131
Di-n-octyl phthalate	1.33	1.43		mg/Kg		107	68 - 134
Benzo[b]fluoranthene	1.33	1.38		mg/Kg		103	69 - 129
Benzo[k]fluoranthene	1.33	1.31		mg/Kg		98	68 - 127
Benzo[a]pyrene	1.33	1.40		mg/Kg		105	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.17		mg/Kg		88	68 - 130
Dibenz(a,h)anthracene	1.33	1.30		mg/Kg		97	64 - 131
Benzo[g,h,i]perylene	1.33	1.40		mg/Kg		105	72 - 131
3 & 4 Methylphenol	1.33	1.44		mg/Kg		108	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517923/2-A
Matrix: Solid
Analysis Batch: 518079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517923

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	126		31 - 166
Phenol-d5	118		30 - 153
Nitrobenzene-d5	100		37 - 147
2-Fluorobiphenyl	94		43 - 145
2,4,6-Tribromophenol	84		31 - 143
Terphenyl-d14	93		42 - 157

Lab Sample ID: 500-173686-1 MS
Matrix: Solid
Analysis Batch: 518390

Client Sample ID: 2615V2-AI-B01 (0-6)
Prep Type: Total/NA
Prep Batch: 517923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.20	F1 *	1.58	2.15	F1	mg/Kg	☼	136	56 - 122
Bis(2-chloroethyl)ether	<0.20	F1	1.58	1.95	F1	mg/Kg	☼	123	55 - 111
1,3-Dichlorobenzene	<0.20		1.58	1.43		mg/Kg	☼	91	60 - 110
1,4-Dichlorobenzene	<0.20		1.58	1.45		mg/Kg	☼	92	61 - 110
1,2-Dichlorobenzene	<0.20		1.58	1.47		mg/Kg	☼	93	62 - 110
2-Methylphenol	<0.20	F1 *	1.58	1.96	F1	mg/Kg	☼	124	60 - 120
2,2'-oxybis[1-chloropropane]	<0.20	F1 *	1.58	2.29	F1	mg/Kg	☼	145	40 - 124
N-Nitrosodi-n-propylamine	<0.079	F1 *	1.58	2.08	F1	mg/Kg	☼	131	56 - 118
Hexachloroethane	<0.20	F1	1.58	0.938	F1	mg/Kg	☼	59	60 - 114
2-Chlorophenol	<0.20	F1	1.58	1.66		mg/Kg	☼	105	64 - 110
Nitrobenzene	<0.039	F1 *	1.58	2.03	F1	mg/Kg	☼	129	60 - 116
Bis(2-chloroethoxy)methane	<0.20	F1	1.58	2.05	F1	mg/Kg	☼	130	60 - 112
1,2,4-Trichlorobenzene	<0.20		1.58	1.44		mg/Kg	☼	91	66 - 117
Isophorone	<0.20	F1 *	1.58	2.10	F1	mg/Kg	☼	133	55 - 110
2,4-Dimethylphenol	<0.39		1.58	1.61		mg/Kg	☼	102	60 - 110
Hexachlorobutadiene	<0.20		1.58	1.35		mg/Kg	☼	86	56 - 120
Naphthalene	<0.039		1.58	1.59		mg/Kg	☼	101	63 - 110
2,4-Dichlorophenol	<0.39		1.58	1.47		mg/Kg	☼	93	58 - 120
4-Chloroaniline	<0.79		1.58	1.13		mg/Kg	☼	72	30 - 150
2,4,6-Trichlorophenol	<0.39		1.58	1.37		mg/Kg	☼	87	57 - 120
2,4,5-Trichlorophenol	<0.39		1.58	1.44		mg/Kg	☼	91	50 - 120
Hexachlorocyclopentadiene	<0.79	F1	1.58	<0.79	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	<0.079		1.58	1.56		mg/Kg	☼	99	69 - 112
2-Nitroaniline	<0.20	F1	1.58	2.08	F1	mg/Kg	☼	131	57 - 124
2-Chloronaphthalene	<0.20		1.58	1.62		mg/Kg	☼	102	69 - 114
4-Chloro-3-methylphenol	<0.39		1.58	1.74		mg/Kg	☼	110	65 - 122
2,6-Dinitrotoluene	<0.20		1.58	1.66		mg/Kg	☼	105	70 - 123
2-Nitrophenol	<0.39		1.58	1.57		mg/Kg	☼	100	60 - 120
3-Nitroaniline	<0.39		1.58	1.59		mg/Kg	☼	101	40 - 122
Dimethyl phthalate	<0.20		1.58	1.65		mg/Kg	☼	104	69 - 116
2,4-Dinitrophenol	<0.79	F1 *	3.16	<0.79	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.039		1.58	1.67		mg/Kg	☼	105	68 - 120
2,4-Dinitrotoluene	<0.20		1.58	1.62		mg/Kg	☼	103	69 - 124
Acenaphthene	<0.039		1.58	1.66		mg/Kg	☼	105	65 - 124
Dibenzofuran	<0.20		1.58	1.66		mg/Kg	☼	105	66 - 115
4-Nitrophenol	<0.79		3.16	2.46		mg/Kg	☼	78	30 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173686-1 MS

Matrix: Solid

Analysis Batch: 518390

Client Sample ID: 2615V2-AI-B01 (0-6)

Prep Type: Total/NA

Prep Batch: 517923

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result			Result	Qualifier				
Fluorene	<0.039		1.58	1.69		mg/Kg	☼	107	62 - 120
4-Nitroaniline	<0.39		1.58	1.56		mg/Kg	☼	99	60 - 160
4-Bromophenyl phenyl ether	<0.20		1.58	1.48		mg/Kg	☼	94	68 - 118
Hexachlorobenzene	<0.079		1.58	1.48		mg/Kg	☼	94	63 - 124
Diethyl phthalate	<0.20		1.58	1.63		mg/Kg	☼	103	58 - 120
4-Chlorophenyl phenyl ether	<0.20		1.58	1.53		mg/Kg	☼	96	62 - 119
Pentachlorophenol	<0.79		3.16	0.851		mg/Kg	☼	27	13 - 112
N-Nitrosodiphenylamine	<0.20		1.58	1.76		mg/Kg	☼	111	65 - 112
4,6-Dinitro-2-methylphenol	<0.79		3.16	0.652	J	mg/Kg	☼	21	10 - 110
Phenanthrene	0.11		1.58	1.75		mg/Kg	☼	104	62 - 120
Anthracene	<0.039		1.58	1.65		mg/Kg	☼	104	70 - 114
Carbazole	<0.20		1.58	1.82		mg/Kg	☼	115	65 - 142
Di-n-butyl phthalate	<0.20		1.58	1.81		mg/Kg	☼	115	65 - 120
Fluoranthene	<0.039		1.58	1.65		mg/Kg	☼	105	62 - 120
Pyrene	<0.039		1.58	1.79		mg/Kg	☼	113	61 - 128
Butyl benzyl phthalate	<0.20		1.58	1.92		mg/Kg	☼	121	71 - 129
Benzo[a]anthracene	<0.039		1.58	1.57		mg/Kg	☼	99	67 - 122
Chrysene	0.026	J	1.58	1.61		mg/Kg	☼	100	63 - 120
3,3'-Dichlorobenzidine	<0.20		1.58	0.919		mg/Kg	☼	58	35 - 128
Bis(2-ethylhexyl) phthalate	<0.20		1.58	1.85		mg/Kg	☼	117	72 - 131
Di-n-octyl phthalate	<0.20		1.58	1.83		mg/Kg	☼	116	68 - 134
Benzo[b]fluoranthene	<0.039		1.58	1.74		mg/Kg	☼	110	69 - 129
Benzo[k]fluoranthene	<0.039		1.58	1.80		mg/Kg	☼	114	68 - 127
Benzo[a]pyrene	<0.039		1.58	1.68		mg/Kg	☼	106	65 - 133
Indeno[1,2,3-cd]pyrene	<0.039	F1	1.58	0.980	F1	mg/Kg	☼	62	68 - 130
Dibenz(a,h)anthracene	<0.039		1.58	1.03		mg/Kg	☼	65	64 - 131
Benzo[g,h,i]perylene	<0.039	F1	1.58	0.904	F1	mg/Kg	☼	57	72 - 131
3 & 4 Methylphenol	<0.20	F1	1.58	1.78		mg/Kg	☼	113	57 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	124		31 - 166
Phenol-d5	125		30 - 153
Nitrobenzene-d5	106		37 - 147
2-Fluorobiphenyl	90		43 - 145
2,4,6-Tribromophenol	59		31 - 143
Terphenyl-d14	97		42 - 157

Lab Sample ID: 500-173686-1 MSD

Matrix: Solid

Analysis Batch: 518390

Client Sample ID: 2615V2-AI-B01 (0-6)

Prep Type: Total/NA

Prep Batch: 517923

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result			Result	Qualifier					RPD	Limit
Phenol	<0.20	F1 *	1.59	2.39	F1	mg/Kg	☼	150	56 - 122	11	30
Bis(2-chloroethyl)ether	<0.20	F1	1.59	2.13	F1	mg/Kg	☼	134	55 - 111	9	30
1,3-Dichlorobenzene	<0.20		1.59	1.59		mg/Kg	☼	100	60 - 110	11	30
1,4-Dichlorobenzene	<0.20		1.59	1.57		mg/Kg	☼	99	61 - 110	8	30
1,2-Dichlorobenzene	<0.20		1.59	1.63		mg/Kg	☼	102	62 - 110	10	30
2-Methylphenol	<0.20	F1 *	1.59	2.05	F1	mg/Kg	☼	128	60 - 120	4	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173686-1 MSD

Matrix: Solid

Analysis Batch: 518390

Client Sample ID: 2615V2-AI-B01 (0-6)

Prep Type: Total/NA

Prep Batch: 517923

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
2,2'-oxybis[1-chloropropane]	<0.20	F1 *	1.59	2.48	F1	mg/Kg	☼	156	40 - 124	8	30	
N-Nitrosodi-n-propylamine	<0.079	F1 *	1.59	2.29	F1	mg/Kg	☼	144	56 - 118	10	30	
Hexachloroethane	<0.20	F1	1.59	0.945	F1	mg/Kg	☼	59	60 - 114	1	30	
2-Chlorophenol	<0.20	F1	1.59	1.80	F1	mg/Kg	☼	113	64 - 110	8	30	
Nitrobenzene	<0.039	F1 *	1.59	2.10	F1	mg/Kg	☼	132	60 - 116	3	30	
Bis(2-chloroethoxy)methane	<0.20	F1	1.59	2.16	F1	mg/Kg	☼	135	60 - 112	5	30	
1,2,4-Trichlorobenzene	<0.20	F1	1.59	1.47	F1	mg/Kg	☼	92	66 - 117	2	30	
Isophorone	<0.20	F1 *	1.59	2.21	F1	mg/Kg	☼	139	55 - 110	5	30	
2,4-Dimethylphenol	<0.39	F1	1.59	1.63	F1	mg/Kg	☼	102	60 - 110	1	30	
Hexachlorobutadiene	<0.20	F1	1.59	1.43	F1	mg/Kg	☼	90	56 - 120	5	30	
Naphthalene	<0.039	F1	1.59	1.66	F1	mg/Kg	☼	104	63 - 110	4	30	
2,4-Dichlorophenol	<0.39	F1	1.59	1.54	F1	mg/Kg	☼	97	58 - 120	5	30	
4-Chloroaniline	<0.79	F1	1.59	1.17	F1	mg/Kg	☼	74	30 - 150	4	30	
2,4,6-Trichlorophenol	<0.39	F1	1.59	1.40	F1	mg/Kg	☼	88	57 - 120	2	30	
2,4,5-Trichlorophenol	<0.39	F1	1.59	1.41	F1	mg/Kg	☼	89	50 - 120	2	30	
Hexachlorocyclopentadiene	<0.79	F1	1.59	<0.80	F1	mg/Kg	☼	0	10 - 133	NC	30	
2-Methylnaphthalene	<0.079	F1	1.59	1.62	F1	mg/Kg	☼	101	69 - 112	4	30	
2-Nitroaniline	<0.20	F1	1.59	2.25	F1	mg/Kg	☼	141	57 - 124	8	30	
2-Chloronaphthalene	<0.20	F1	1.59	1.71	F1	mg/Kg	☼	107	69 - 114	6	30	
4-Chloro-3-methylphenol	<0.39	F1	1.59	1.78	F1	mg/Kg	☼	112	65 - 122	3	30	
2,6-Dinitrotoluene	<0.20	F1	1.59	1.73	F1	mg/Kg	☼	108	70 - 123	4	30	
2-Nitrophenol	<0.39	F1	1.59	1.65	F1	mg/Kg	☼	103	60 - 120	4	30	
3-Nitroaniline	<0.39	F1	1.59	1.65	F1	mg/Kg	☼	103	40 - 122	3	30	
Dimethyl phthalate	<0.20	F1	1.59	1.72	F1	mg/Kg	☼	108	69 - 116	4	30	
2,4-Dinitrophenol	<0.79	F1 *	3.19	<0.80	F1	mg/Kg	☼	0	10 - 100	NC	30	
Acenaphthylene	<0.039	F1	1.59	1.73	F1	mg/Kg	☼	109	68 - 120	4	30	
2,4-Dinitrotoluene	<0.20	F1	1.59	1.67	F1	mg/Kg	☼	105	69 - 124	3	30	
Acenaphthene	<0.039	F1	1.59	1.72	F1	mg/Kg	☼	108	65 - 124	3	30	
Dibenzofuran	<0.20	F1	1.59	1.74	F1	mg/Kg	☼	109	66 - 115	5	30	
4-Nitrophenol	<0.79	F1	3.19	2.37	F1	mg/Kg	☼	74	30 - 122	4	30	
Fluorene	<0.039	F1	1.59	1.73	F1	mg/Kg	☼	109	62 - 120	3	30	
4-Nitroaniline	<0.39	F1	1.59	1.47	F1	mg/Kg	☼	92	60 - 160	6	30	
4-Bromophenyl phenyl ether	<0.20	F1	1.59	1.49	F1	mg/Kg	☼	94	68 - 118	1	30	
Hexachlorobenzene	<0.079	F1	1.59	1.48	F1	mg/Kg	☼	93	63 - 124	0	30	
Diethyl phthalate	<0.20	F1	1.59	1.71	F1	mg/Kg	☼	107	58 - 120	5	30	
4-Chlorophenyl phenyl ether	<0.20	F1	1.59	1.58	F1	mg/Kg	☼	99	62 - 119	4	30	
Pentachlorophenol	<0.79	F1	3.19	0.816	F1	mg/Kg	☼	26	13 - 112	4	30	
N-Nitrosodiphenylamine	<0.20	F1	1.59	1.78	F1	mg/Kg	☼	112	65 - 112	1	30	
4,6-Dinitro-2-methylphenol	<0.79	F1	3.19	0.688	J	mg/Kg	☼	22	10 - 110	5	30	
Phenanthrene	0.11	F1	1.59	1.80	F1	mg/Kg	☼	106	62 - 120	3	30	
Anthracene	<0.039	F1	1.59	1.67	F1	mg/Kg	☼	105	70 - 114	1	30	
Carbazole	<0.20	F1	1.59	1.86	F1	mg/Kg	☼	117	65 - 142	2	30	
Di-n-butyl phthalate	<0.20	F1	1.59	1.87	F1	mg/Kg	☼	118	65 - 120	3	30	
Fluoranthene	<0.039	F1	1.59	1.68	F1	mg/Kg	☼	106	62 - 120	2	30	
Pyrene	<0.039	F1	1.59	1.88	F1	mg/Kg	☼	118	61 - 128	5	30	
Butyl benzyl phthalate	<0.20	F1	1.59	2.04	F1	mg/Kg	☼	128	71 - 129	6	30	
Benzo[a]anthracene	<0.039	F1	1.59	1.66	F1	mg/Kg	☼	104	67 - 122	5	30	
Chrysene	0.026	J	1.59	1.66	F1	mg/Kg	☼	103	63 - 120	3	30	
3,3'-Dichlorobenzidine	<0.20	F1	1.59	1.04	F1	mg/Kg	☼	65	35 - 128	12	30	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173686-1 MSD

Matrix: Solid

Analysis Batch: 518390

Client Sample ID: 2615V2-AI-B01 (0-6)

Prep Type: Total/NA

Prep Batch: 517923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	<0.20		1.59	1.97		mg/Kg	☼	124	72 - 131	6	30
Di-n-octyl phthalate	<0.20		1.59	1.84		mg/Kg	☼	116	68 - 134	1	30
Benzo[b]fluoranthene	<0.039		1.59	1.85		mg/Kg	☼	116	69 - 129	6	30
Benzo[k]fluoranthene	<0.039		1.59	1.89		mg/Kg	☼	119	68 - 127	5	30
Benzo[a]pyrene	<0.039		1.59	1.74		mg/Kg	☼	109	65 - 133	4	30
Indeno[1,2,3-cd]pyrene	<0.039	F1	1.59	1.04	F1	mg/Kg	☼	65	68 - 130	5	30
Dibenz(a,h)anthracene	<0.039		1.59	1.09		mg/Kg	☼	68	64 - 131	6	30
Benzo[g,h,i]perylene	<0.039	F1	1.59	0.958	F1	mg/Kg	☼	60	72 - 131	6	30
3 & 4 Methylphenol	<0.20	F1	1.59	2.03	F1	mg/Kg	☼	128	57 - 120	13	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	141		31 - 166
Phenol-d5	139		30 - 153
Nitrobenzene-d5	111		37 - 147
2-Fluorobiphenyl	97		43 - 145
2,4,6-Tribromophenol	65		31 - 143
Terphenyl-d14	103		42 - 157

Lab Sample ID: LB 500-516882/1-D

Matrix: Solid

Analysis Batch: 517259

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 517214

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 00:55	1
Cresol, o-	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 00:55	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		11/25/19 11:48	11/26/19 00:55	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		11/25/19 11:48	11/26/19 00:55	1
Pyridine	<0.20		0.20	0.20	mg/L		11/25/19 11:48	11/26/19 00:55	1
Hexachloro-1,3-butadiene	<0.050		0.050	0.050	mg/L		11/25/19 11:48	11/26/19 00:55	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		11/25/19 11:48	11/26/19 00:55	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		11/25/19 11:48	11/26/19 00:55	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		11/25/19 11:48	11/26/19 00:55	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		11/25/19 11:48	11/26/19 00:55	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		11/25/19 11:48	11/26/19 00:55	1
m & p - Cresol	<0.020		0.020	0.020	mg/L		11/25/19 11:48	11/26/19 00:55	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		27 - 110	11/25/19 11:48	11/26/19 00:55	1
Phenol-d5	38		20 - 100	11/25/19 11:48	11/26/19 00:55	1
Nitrobenzene-d5	92		36 - 120	11/25/19 11:48	11/26/19 00:55	1
2-Fluorobiphenyl	104		34 - 110	11/25/19 11:48	11/26/19 00:55	1
2,4,6-Tribromophenol	98		40 - 145	11/25/19 11:48	11/26/19 00:55	1
Terphenyl-d14	131		40 - 145	11/25/19 11:48	11/26/19 00:55	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173686-8 MS
Matrix: Solid
Analysis Batch: 517259

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: TCLP
Prep Batch: 517214

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,4-Dichlorobenzene	<0.020		0.400	0.308		mg/L		77	23 - 110
Cresol, o-	<0.020		0.400	0.332		mg/L		83	53 - 115
Hexachloroethane	<0.050		0.400	0.280		mg/L		70	20 - 100
Nitrobenzene	<0.010		0.400	0.364		mg/L		91	54 - 121
Pyridine	<0.20		0.800	0.325		mg/L		41	15 - 110
Hexachloro-1,3-butadiene	<0.050		0.400	0.279		mg/L		70	20 - 100
2,4,6-Trichlorophenol	<0.050		0.400	0.398		mg/L		99	62 - 121
2,4,5-Trichlorophenol	<0.10		0.400	0.409		mg/L		102	63 - 124
2,4-Dinitrotoluene	<0.010		0.400	0.370		mg/L		93	63 - 129
Hexachlorobenzene	<0.0050		0.400	0.398		mg/L		100	61 - 126
Pentachlorophenol	<0.20		0.800	0.660		mg/L		82	42 - 148
m & p - Cresol	<0.020		0.400	0.314		mg/L		79	50 - 116

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	56		27 - 110
Phenol-d5	38		20 - 100
Nitrobenzene-d5	82		36 - 120
2-Fluorobiphenyl	93		34 - 110
2,4,6-Tribromophenol	95		40 - 145
Terphenyl-d14	98		40 - 145

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 500-517422/1-A
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.00010		0.00010	0.000050	mg/L		11/26/19 13:37	11/29/19 17:14	1
Endrin	<0.000050		0.000050	0.000025	mg/L		11/26/19 13:37	11/29/19 17:14	1
gamma-BHC (Lindane)	<0.000050		0.000050	0.000025	mg/L		11/26/19 13:37	11/29/19 17:14	1
Heptachlor	<0.000040		0.000040	0.000020	mg/L		11/26/19 13:37	11/29/19 17:14	1
Heptachlor epoxide	<0.000040		0.000040	0.000020	mg/L		11/26/19 13:37	11/29/19 17:14	1
Methoxychlor	<0.00010		0.00010	0.000050	mg/L		11/26/19 13:37	11/29/19 17:14	1
Toxaphene	<0.00050		0.00050	0.00025	mg/L		11/26/19 13:37	11/29/19 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	92		30 - 130	11/26/19 13:37	11/29/19 17:14	1
Tetrachloro-m-xylene	86		30 - 120	11/26/19 13:37	11/29/19 17:14	1

Lab Sample ID: LCS 500-517422/2-A
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Endrin	0.0000996	0.000101		mg/L		101	60 - 132
gamma-BHC (Lindane)	0.0000999	0.0000891		mg/L		89	68 - 120
Heptachlor	0.0000999	0.0000974		mg/L		97	40 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 500-517422/2-A
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor epoxide	0.000100	0.000101		mg/L		101	64 - 120
Methoxychlor	0.00100	0.000960		mg/L		96	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	96		30 - 130
Tetrachloro-m-xylene	92		30 - 120

Lab Sample ID: LCS 500-517422/3-A
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	0.0100	0.00977		mg/L		98	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	98		30 - 130
Tetrachloro-m-xylene	91		30 - 120

Lab Sample ID: LB 500-516882/1-F
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517422

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.010		0.010	0.0050	mg/L		11/26/19 13:37	11/29/19 18:16	1
Endrin	<0.0050		0.0050	0.0025	mg/L		11/26/19 13:37	11/29/19 18:16	1
gamma-BHC (Lindane)	<0.0050		0.0050	0.0025	mg/L		11/26/19 13:37	11/29/19 18:16	1
Heptachlor	<0.0040		0.0040	0.0020	mg/L		11/26/19 13:37	11/29/19 18:16	1
Heptachlor epoxide	<0.0040		0.0040	0.0020	mg/L		11/26/19 13:37	11/29/19 18:16	1
Methoxychlor	<0.010		0.010	0.0050	mg/L		11/26/19 13:37	11/29/19 18:16	1
Toxaphene	<0.050		0.050	0.025	mg/L		11/26/19 13:37	11/29/19 18:16	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		30 - 130	11/26/19 13:37	11/29/19 18:16	1
Tetrachloro-m-xylene	95		30 - 120	11/26/19 13:37	11/29/19 18:16	1

Lab Sample ID: 500-173686-8 MS
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: TCLP
Prep Batch: 517422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin	<0.0050		0.00996	0.0113		mg/L		114	60 - 132
gamma-BHC (Lindane)	<0.0050		0.00999	0.0100		mg/L		101	68 - 120
Heptachlor	<0.0040		0.00999	0.0107		mg/L		107	40 - 120
Heptachlor epoxide	<0.0040		0.0100	0.0114		mg/L		114	64 - 120
Methoxychlor	<0.010		0.100	0.106		mg/L		106	63 - 135

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 500-173686-8 MS
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: TCLP
Prep Batch: 517422

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	109		30 - 130
Tetrachloro-m-xylene	103		30 - 120

Lab Sample ID: 500-173686-8 MS
Matrix: Solid
Analysis Batch: 517875

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: TCLP
Prep Batch: 517422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	<0.050		1.00	1.00		mg/L		100	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	100		30 - 130
Tetrachloro-m-xylene	93		30 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-517271/1-A
Matrix: Solid
Analysis Batch: 517355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517271

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.017		0.017	0.0059	mg/Kg		11/25/19 19:07	11/26/19 09:24	1
PCB-1221	<0.017		0.017	0.0073	mg/Kg		11/25/19 19:07	11/26/19 09:24	1
PCB-1232	<0.017		0.017	0.0073	mg/Kg		11/25/19 19:07	11/26/19 09:24	1
PCB-1242	<0.017		0.017	0.0055	mg/Kg		11/25/19 19:07	11/26/19 09:24	1
PCB-1248	<0.017		0.017	0.0066	mg/Kg		11/25/19 19:07	11/26/19 09:24	1
PCB-1254	<0.017		0.017	0.0036	mg/Kg		11/25/19 19:07	11/26/19 09:24	1
PCB-1260	<0.017		0.017	0.0082	mg/Kg		11/25/19 19:07	11/26/19 09:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	69		37 - 121	11/25/19 19:07	11/26/19 09:24	1
Tetrachloro-m-xylene	78		49 - 129	11/25/19 19:07	11/26/19 09:24	1

Lab Sample ID: LCS 500-517271/2-A
Matrix: Solid
Analysis Batch: 517355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517271

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.167	0.150		mg/Kg		90	57 - 120
PCB-1260	0.167	0.143		mg/Kg		86	61 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	79		37 - 121
Tetrachloro-m-xylene	89		49 - 129

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 8151 - TCLP Herbicides

Lab Sample ID: MB 500-517382/1-A
Matrix: Solid
Analysis Batch: 517512

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0010		0.0010	0.00050	mg/L		11/26/19 09:27	11/27/19 10:21	1
Silvex (2,4,5-TP)	<0.0010		0.0010	0.00050	mg/L		11/26/19 09:27	11/27/19 10:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	100		25 - 130				11/26/19 09:27	11/27/19 10:21	1

Lab Sample ID: LCS 500-517382/2-A
Matrix: Solid
Analysis Batch: 517512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517382
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4-D	0.0101	0.0105		mg/L		104	30 - 115
Silvex (2,4,5-TP)	0.00250	0.00228		mg/L		91	32 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
DCAA	105		25 - 130				

Lab Sample ID: LB 500-516882/1-E
Matrix: Solid
Analysis Batch: 517512

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517382

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.10		0.10	0.050	mg/L		11/26/19 09:27	11/27/19 11:00	1
Silvex (2,4,5-TP)	<0.10		0.10	0.050	mg/L		11/26/19 09:27	11/27/19 11:00	1
Surrogate	LB %Recovery	LB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	91		25 - 130				11/26/19 09:27	11/27/19 11:00	1

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-517066/2-A
Matrix: Solid
Analysis Batch: 517520

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517066
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.503		mg/L		101	80 - 120

Lab Sample ID: LCS 500-517068/2-A
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517068
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0959		mg/L		96	80 - 120
Barium	0.500	0.517		mg/L		103	80 - 120
Beryllium	0.0500	0.0514		mg/L		103	80 - 120
Boron	1.00	0.921		mg/L		92	80 - 120
Cadmium	0.0500	0.0488		mg/L		98	80 - 120
Chromium	0.200	0.197		mg/L		98	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-517068/2-A
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.500	0.507		mg/L		101	80 - 120
Iron	1.00	1.23	*	mg/L		123	80 - 120
Lead	0.100	0.0984		mg/L		98	80 - 120
Manganese	0.500	0.508		mg/L		102	80 - 120
Nickel	0.500	0.509		mg/L		102	80 - 120
Selenium	0.100	0.0930		mg/L		93	80 - 120
Silver	0.0500	0.0478		mg/L		96	80 - 120
Zinc	0.500	0.494	J	mg/L		99	80 - 120

Lab Sample ID: MB 500-518168/1-A
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.575	J	2.0	0.39	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Barium	<1.0		1.0	0.11	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Beryllium	0.107	J	0.40	0.093	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Boron	<5.0		5.0	0.47	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Cadmium	0.0363	J	0.20	0.036	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Calcium	18.4	J	20	3.4	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Chromium	0.519	J	1.0	0.50	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Copper	<1.0		1.0	0.28	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Lead	<0.50		0.50	0.23	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Magnesium	15.3		10	5.0	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Manganese	0.492	J	1.0	0.15	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Nickel	0.307	J	1.0	0.29	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Potassium	<50		50	18	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Silver	<0.50		0.50	0.13	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Sodium	19.6	J	100	15	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/03/19 09:00	12/03/19 15:55	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/03/19 09:00	12/03/19 15:55	1

Lab Sample ID: MB 500-518168/1-A
Matrix: Solid
Analysis Batch: 518695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	19.9	J	20	10	mg/Kg		12/03/19 09:00	12/04/19 09:45	1

Lab Sample ID: LCS 500-518168/2-A
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.9		mg/Kg		94	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518168/2-A
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	10.0	9.21		mg/Kg		92	80 - 120
Barium	200	189		mg/Kg		95	80 - 120
Beryllium	5.00	4.65		mg/Kg		93	80 - 120
Boron	100	83.2		mg/Kg		83	80 - 120
Cadmium	5.00	4.39		mg/Kg		88	80 - 120
Calcium	1000	954		mg/Kg		95	80 - 120
Chromium	20.0	19.0		mg/Kg		95	80 - 120
Cobalt	50.0	47.3		mg/Kg		95	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Lead	10.0	9.10		mg/Kg		91	80 - 120
Magnesium	1000	929		mg/Kg		93	80 - 120
Manganese	50.0	46.9		mg/Kg		94	80 - 120
Nickel	50.0	47.7		mg/Kg		95	80 - 120
Potassium	1000	960		mg/Kg		96	80 - 120
Selenium	10.0	8.47		mg/Kg		85	80 - 120
Silver	5.00	4.38		mg/Kg		88	80 - 120
Sodium	1000	970		mg/Kg		97	80 - 120
Thallium	10.0	8.99		mg/Kg		90	80 - 120
Vanadium	50.0	46.8		mg/Kg		94	80 - 120
Zinc	50.0	46.1		mg/Kg		92	80 - 120

Lab Sample ID: LCS 500-518168/2-A
Matrix: Solid
Analysis Batch: 518695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	100	115		mg/Kg		115	80 - 120

Lab Sample ID: 500-173686-1 MS
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: 2615V2-AI-B01 (0-6)
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.36	J B F1	28.9	4.72	F1	mg/Kg	☼	15	75 - 125
Arsenic	5.8	F1	5.78	9.58	F1	mg/Kg	☼	65	75 - 125
Barium	36		116	139		mg/Kg	☼	89	75 - 125
Beryllium	0.70	B	2.89	3.28		mg/Kg	☼	89	75 - 125
Boron	17		57.8	69.1		mg/Kg	☼	90	75 - 125
Cadmium	0.069	J F1 B	2.89	2.18	F1	mg/Kg	☼	73	75 - 125
Calcium	23000	B	578	23800	4	mg/Kg	☼	118	75 - 125
Chromium	17	B F1	11.6	32.6	F1	mg/Kg	☼	134	75 - 125
Cobalt	13		28.9	42.6		mg/Kg	☼	103	75 - 125
Copper	29		14.5	45.0		mg/Kg	☼	111	75 - 125
Iron	17000	B	57.8	19500	4	mg/Kg	☼	3828	75 - 125
Lead	11	F1	5.78	21.9	F1	mg/Kg	☼	189	75 - 125
Magnesium	16000	B ^	578	18200	4	mg/Kg	☼	436	75 - 125
Manganese	230	B	28.9	280	4	mg/Kg	☼	171	75 - 125
Nickel	37	B	28.9	71.7		mg/Kg	☼	120	75 - 125
Potassium	3400		578	6450	4	mg/Kg	☼	534	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173686-1 MS
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: 2615V2-AI-B01 (0-6)
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Selenium	0.92	F1 B	5.78	4.65	F1	mg/Kg	☼	65	75 - 125
Silver	2.4	B	2.89	5.61		mg/Kg	☼	111	75 - 125
Sodium	1400	B F1	578	2190	F1	mg/Kg	☼	135	75 - 125
Thallium	1.1	F1	5.78	5.49		mg/Kg	☼	77	75 - 125
Vanadium	20		28.9	54.7		mg/Kg	☼	119	75 - 125
Zinc	48	F1	28.9	83.7		mg/Kg	☼	123	75 - 125

Lab Sample ID: 500-173686-1 MSD
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: 2615V2-AI-B01 (0-6)
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.36	J B F1	29.4	4.25	F1	mg/Kg	☼	13	75 - 125	10	20
Arsenic	5.8	F1	5.89	11.6		mg/Kg	☼	97	75 - 125	19	20
Barium	36		118	133		mg/Kg	☼	82	75 - 125	5	20
Beryllium	0.70	B	2.94	3.21		mg/Kg	☼	85	75 - 125	2	20
Boron	17		58.9	64.8		mg/Kg	☼	81	75 - 125	7	20
Cadmium	0.069	J F1 B	2.94	2.20	F1	mg/Kg	☼	72	75 - 125	1	20
Calcium	23000	B	589	25100	4	mg/Kg	☼	340	75 - 125	5	20
Chromium	17	B F1	11.8	30.9		mg/Kg	☼	117	75 - 125	6	20
Cobalt	13		29.4	41.8		mg/Kg	☼	98	75 - 125	2	20
Copper	29		14.7	42.5		mg/Kg	☼	92	75 - 125	6	20
Iron	17000	B	58.9	20400	4	mg/Kg	☼	5279	75 - 125	4	20
Lead	11	F1	5.89	20.2	F1	mg/Kg	☼	157	75 - 125	8	20
Magnesium	16000	B ^	589	18300	4	mg/Kg	☼	457	75 - 125	1	20
Manganese	230	B	29.4	277	4	mg/Kg	☼	159	75 - 125	1	20
Nickel	37	B	29.4	71.5		mg/Kg	☼	118	75 - 125	0	20
Potassium	3400		589	5810	4	mg/Kg	☼	414	75 - 125	11	20
Selenium	0.92	F1 B	5.89	4.35	F1	mg/Kg	☼	58	75 - 125	7	20
Silver	2.4	B	2.94	5.65		mg/Kg	☼	110	75 - 125	1	20
Sodium	1400	B F1	589	2170	F1	mg/Kg	☼	129	75 - 125	1	20
Thallium	1.1	F1	5.89	5.33	F1	mg/Kg	☼	73	75 - 125	3	20
Vanadium	20		29.4	51.1		mg/Kg	☼	105	75 - 125	7	20
Zinc	48	F1	29.4	91.7	F1	mg/Kg	☼	149	75 - 125	9	20

Lab Sample ID: 500-173686-1 DU
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: 2615V2-AI-B01 (0-6)
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	0.36	J B F1	0.697	J F5	mg/Kg	☼	64	20
Arsenic	5.8	F1	6.70		mg/Kg	☼	14	20
Barium	36		36.2		mg/Kg	☼	1	20
Beryllium	0.70	B	0.903	F5	mg/Kg	☼	25	20
Boron	17		18.7		mg/Kg	☼	10	20
Cadmium	0.069	J F1 B	0.0332	J F5	mg/Kg	☼	70	20
Calcium	23000	B	29100	F3	mg/Kg	☼	23	20
Chromium	17	B F1	19.0		mg/Kg	☼	10	20
Cobalt	13		13.9		mg/Kg	☼	7	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173686-1 DU
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: 2615V2-AI-B01 (0-6)
Prep Type: Total/NA
Prep Batch: 518168

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Copper	29		27.4		mg/Kg	☼	5	20
Iron	17000	B	20000		mg/Kg	☼	15	20
Lead	11	F1	17.0	F3	mg/Kg	☼	43	20
Magnesium	16000	B ^	19100		mg/Kg	☼	20	20
Manganese	230	B	266		mg/Kg	☼	14	20
Nickel	37	B	44.1		mg/Kg	☼	18	20
Potassium	3400		3660		mg/Kg	☼	8	20
Selenium	0.92	F1 B	0.668	F5	mg/Kg	☼	32	20
Silver	2.4	B	2.95		mg/Kg	☼	20	20
Sodium	1400	B F1	1660		mg/Kg	☼	16	20
Thallium	1.1	F1	1.57	F5	mg/Kg	☼	40	20
Vanadium	20		22.9		mg/Kg	☼	12	20
Zinc	48	F1	51.6		mg/Kg	☼	7	20

Lab Sample ID: LB 500-516882/1-B
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517068

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050		0.050	0.010	mg/L		11/24/19 16:18	11/27/19 19:40	1
Barium	<0.50		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:18	11/27/19 19:40	1
Boron	<0.50		0.50	0.050	mg/L		11/24/19 16:18	11/27/19 19:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:18	11/27/19 19:40	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:40	1
Cobalt	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:40	1
Iron	<0.40		0.40	0.20	mg/L		11/24/19 16:18	11/27/19 19:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:18	11/27/19 19:40	1
Manganese	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:40	1
Nickel	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:40	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:18	11/27/19 19:40	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:18	11/27/19 19:40	1
Zinc	0.147	J	0.50	0.020	mg/L		11/24/19 16:18	11/27/19 19:40	1

Lab Sample ID: 500-173686-17 MS
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: TCLP
Prep Batch: 517068

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	<0.050		0.100	0.112		mg/L		112	75 - 125
Barium	0.70		0.500	1.27		mg/L		114	75 - 125
Beryllium	<0.0040		0.0500	0.0495		mg/L		99	75 - 125
Boron	0.12	J	1.00	0.999		mg/L		88	75 - 125
Cadmium	<0.0050		0.0500	0.0570		mg/L		114	75 - 125
Chromium	<0.025		0.200	0.188		mg/L		94	75 - 125
Cobalt	0.015	J	0.500	0.563		mg/L		110	75 - 125
Iron	0.21	J *	1.00	1.16		mg/L		95	75 - 125
Lead	<0.0075		0.100	0.106		mg/L		106	75 - 125
Manganese	1.9		0.500	2.53		mg/L		125	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173686-17 MS
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: TCLP
Prep Batch: 517068

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.039		0.500	0.578		mg/L		108	75 - 125
Selenium	<0.050		0.100	0.109		mg/L		109	75 - 125
Silver	<0.025		0.0500	0.0609		mg/L		122	75 - 125
Zinc	0.026	J B	0.500	0.609	^	mg/L		117	75 - 125

Lab Sample ID: 500-173686-17 DU
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: TCLP
Prep Batch: 517068

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	<0.050		<0.050		mg/L		NC	20
Barium	0.70		0.713		mg/L		2	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.12	J	0.125	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.015	J	0.0149	J	mg/L		2	20
Iron	0.21	J*	0.251	J*	mg/L		18	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.9		1.93		mg/L		2	20
Nickel	0.039		0.0380		mg/L		2	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.026	J B	0.0263	J ^	mg/L		2	20

Lab Sample ID: LB 500-516880/1-B
Matrix: Solid
Analysis Batch: 517520

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 517066

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/24/19 16:14	11/26/19 20:35	1

Lab Sample ID: 500-173686-17 MS
Matrix: Solid
Analysis Batch: 517520

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: SPLP East
Prep Batch: 517066

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.032		0.500	0.531		mg/L		100	75 - 125

Lab Sample ID: 500-173686-17 DU
Matrix: Solid
Analysis Batch: 517520

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: SPLP East
Prep Batch: 517066

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.032		0.0304		mg/L		4	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-517068/2-A
Matrix: Solid
Analysis Batch: 517614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.487		mg/L		97	80 - 120
Thallium	0.100	0.0988		mg/L		99	80 - 120

Lab Sample ID: LB 500-516882/1-B
Matrix: Solid
Analysis Batch: 517614

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517068

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:18	11/27/19 01:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:18	11/27/19 01:02	1

Lab Sample ID: 500-173686-17 MS
Matrix: Solid
Analysis Batch: 517614

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: TCLP
Prep Batch: 517068

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.472		mg/L		94	75 - 125
Thallium	<0.0020		0.100	0.100		mg/L		100	75 - 125

Lab Sample ID: 500-173686-17 DU
Matrix: Solid
Analysis Batch: 517614

Client Sample ID: 2615V2-AI-B26 (10-15)
Prep Type: TCLP
Prep Batch: 517068

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-517185/12-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517185

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:19	1

Lab Sample ID: LCS 500-517185/13-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517185

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00204		mg/L		102	80 - 120

Lab Sample ID: LB 500-516882/1-C
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517185

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:33	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-173686-7 MS
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: 2615V2-AI-B02 (6-12)
Prep Type: TCLP
Prep Batch: 517185

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00109		mg/L		108	75 - 125

Lab Sample ID: 500-173686-7 DU
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: 2615V2-AI-B02 (6-12)
Prep Type: TCLP
Prep Batch: 517185

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-517385/12-A
Matrix: Solid
Analysis Batch: 517626

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/26/19 14:35	11/27/19 09:49	1

Lab Sample ID: LCS 500-517385/13-A
Matrix: Solid
Analysis Batch: 517626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.163		mg/Kg		97	80 - 120

Lab Sample ID: 500-173686-10 MS
Matrix: Solid
Analysis Batch: 517626

Client Sample ID: 2615V2-AI-B02 (24-30)
Prep Type: Total/NA
Prep Batch: 517385

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.021		0.0933	0.100		mg/Kg	☼	85	75 - 125

Lab Sample ID: 500-173686-10 MSD
Matrix: Solid
Analysis Batch: 517626

Client Sample ID: 2615V2-AI-B02 (24-30)
Prep Type: Total/NA
Prep Batch: 517385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.021		0.0933	0.104		mg/Kg	☼	89	75 - 125	4	20

Lab Sample ID: 500-173686-10 DU
Matrix: Solid
Analysis Batch: 517626

Client Sample ID: 2615V2-AI-B02 (24-30)
Prep Type: Total/NA
Prep Batch: 517385

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.021		0.0196		mg/Kg	☼	6	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 7.3.4 - Reactive Sulfide

Lab Sample ID: MB 500-517732/1-A
Matrix: Solid
Analysis Batch: 517735

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517732

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<50		50	3.9	mg/Kg		11/27/19 20:50	11/27/19 22:57	1

Lab Sample ID: LCS 500-517732/2-A
Matrix: Solid
Analysis Batch: 517735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517732
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sulfide, Reactive	181	167		mg/Kg		92	80 - 120

Lab Sample ID: 500-173686-8 MS
Matrix: Solid
Analysis Batch: 517735

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: Total/NA
Prep Batch: 517732
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sulfide, Reactive	<49		175	141		mg/Kg		81	75 - 125

Lab Sample ID: 500-173686-8 MSD
Matrix: Solid
Analysis Batch: 517735

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: Total/NA
Prep Batch: 517732
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfide, Reactive	<49		173	144		mg/Kg		83	75 - 125	2	20

Method: 9014 - Reactive Cyanide

Lab Sample ID: MB 500-517594/1-A
Matrix: Solid
Analysis Batch: 517714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517594

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<0.50		0.50	0.50	mg/Kg		11/27/19 10:50	11/27/19 16:45	1

Lab Sample ID: HLCS 500-517594/2-A
Matrix: Solid
Analysis Batch: 517714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517594
%Rec.

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	20.0	19.6		mg/Kg		98	90 - 110

Lab Sample ID: LCS 500-517594/3-A
Matrix: Solid
Analysis Batch: 517714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517594
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	5.00	4.95		mg/Kg		99	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Method: 9014 - Reactive Cyanide (Continued)

Lab Sample ID: LLCS 500-517594/4-A
Matrix: Solid
Analysis Batch: 517714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517594
%Rec.

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	2.00	1.80		mg/Kg		90	75 - 125

Lab Sample ID: 500-173686-8 MS
Matrix: Solid
Analysis Batch: 517714

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: Total/NA
Prep Batch: 517594
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	<0.47		1.87	1.72		mg/Kg		92	75 - 125

Lab Sample ID: 500-173686-8 MSD
Matrix: Solid
Analysis Batch: 517714

Client Sample ID: 2615V2-AI-B02 (12-18)
Prep Type: Total/NA
Prep Batch: 517594
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyanide, Reactive	<0.47		1.89	1.90		mg/Kg		100	75 - 125	10	20

Method: 9045D - pH

Lab Sample ID: 500-173686-9 DU
Matrix: Solid
Analysis Batch: 517162

Client Sample ID: 2615V2-AI-B02 (18-24)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.6		7.5		SU		0.7	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Date Collected: 11/19/19 00:05

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 20:43	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 19:48	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:07	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:35	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 08:42		
					(End)	11/25/19 08:41		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B01 (0-6)

Lab Sample ID: 500-173686-1

Date Collected: 11/19/19 00:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 17:50	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 02:09	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:03	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 09:54	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 20:47	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 19:52	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:10	FXG	TAL CHI

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Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:37	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	JJB	TAL CHI	
					(Start)	11/25/19 08:42		
					(End)	11/25/19 08:41		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B01 (6-12)

Lab Sample ID: 500-173686-2

Date Collected: 11/19/19 00:16

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 18:16	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 02:37	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:30	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 09:56	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Date Collected: 11/19/19 00:26

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 20:51	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 19:57	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:12	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	JJB	TAL CHI	
					(Start)	11/25/19 08:42		
					(End)	11/25/19 08:41		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (12-18)

Lab Sample ID: 500-173686-3

Date Collected: 11/19/19 00:26

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 18:42	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 03:04	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:34	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:29	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 09:58	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 20:55	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:01	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:15	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:40	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	(Start) 11/25/19 09:39 (End) 11/25/19 08:42	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 13:26	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 03:32	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:38	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B01 (18-24)

Lab Sample ID: 500-173686-4

Date Collected: 11/19/19 00:33

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:33	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:00	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Date Collected: 11/19/19 00:38

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 20:59	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:05	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:17	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:41	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B01 (24-30)

Lab Sample ID: 500-173686-5

Date Collected: 11/19/19 00:38

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 13:52	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 04:00	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:42	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:37	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:02	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Date Collected: 11/19/19 01:34

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:03	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:09	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:20	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:43	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B02 (0-6)

Lab Sample ID: 500-173686-6

Date Collected: 11/19/19 01:34

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 14:18	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 04:28	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:46	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:04	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:07	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:13	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:22	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:45	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	JJB	TAL CHI	
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B02 (6-12)

Lab Sample ID: 500-173686-7

Date Collected: 11/19/19 01:39

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 14:44	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 04:56	NRJ	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:50	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:06	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			517434	11/26/19 14:05	GCA	TAL CHI
TCLP	Analysis	8260B		20	517534	11/27/19 18:20	JLC	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3510C			517214	11/25/19 11:48	DAK	TAL CHI
TCLP	Analysis	8270D		1	517259	11/26/19 02:54	NRJ	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3510C			517422	11/26/19 13:37	DAK	TAL CHI
TCLP	Analysis	8081B		1	517875	11/29/19 18:37	PJ1	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	8151A			517382	11/26/19 09:30	DAK	TAL CHI
TCLP	Analysis	8151		1	517512	11/27/19 12:56	JBj	TAL CHI
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:19	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:18	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:25	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:12	MJG	TAL CHI
Total/NA	Analysis	1010A		1	518722		MS	TAL CHI
					(Start)	12/04/19 09:42		
					(End)	12/04/19 11:11		
Total/NA	Prep	7.3.4			517732	11/27/19 20:50	SJP	TAL CHI
Total/NA	Analysis	7.3.4		1	517735	11/27/19 23:00	SJP	TAL CHI
Total/NA	Prep	9010B			517594	11/27/19 10:50	MS	TAL CHI
Total/NA	Analysis	9014		1	517714	11/27/19 16:45	MS	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	9095A		1	518267		SJP	TAL CHI
					(Start)	12/02/19 19:38		
					(End)	12/02/19 19:43		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B02 (12-18)

Lab Sample ID: 500-173686-8

Date Collected: 11/19/19 01:50

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 15:09	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518274	12/03/19 05:23	NRJ	TAL CHI
Total/NA	Prep	3541			517271	11/25/19 19:07	JP1	TAL CHI
Total/NA	Analysis	8082A		1	517355	11/26/19 09:55	BJH	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:54	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:41	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:08	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Date Collected: 11/19/19 01:55

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:23	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:30	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:35	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:13	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	(Start) 11/25/19 09:39 (End) 11/25/19 08:42	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B02 (18-24)

Lab Sample ID: 500-173686-9

Date Collected: 11/19/19 01:55

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 15:36	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 12:15	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 16:58	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:46	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:15	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:27	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:34	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:37	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:15	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B02 (24-30)

Lab Sample ID: 500-173686-10

Date Collected: 11/19/19 02:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 16:02	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 12:42	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:10	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 13:25	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:17	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:31	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:38	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:40	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:17	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B27 (0-5)

Lab Sample ID: 500-173686-11

Date Collected: 11/19/19 03:08

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 16:27	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 14:06	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:14	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:54	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:26	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:35	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:43	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:42	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:18	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)

Lab Sample ID: 500-173686-12

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 16:53	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 14:34	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:18	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 10:58	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:28	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:40	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:47	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:45	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:20	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	(Start) 11/25/19 09:39 (End) 11/25/19 08:42	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 17:19	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 15:02	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:22	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B27 (5-10)D

Lab Sample ID: 500-173686-13

Date Collected: 11/19/19 03:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 11:16	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:30	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Date Collected: 11/19/19 03:25

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:44	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:51	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:47	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:21	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B27 (10-15)

Lab Sample ID: 500-173686-14

Date Collected: 11/19/19 03:25

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 17:45	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 15:30	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:26	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 11:20	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:32	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Date Collected: 11/19/19 04:00

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:48	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:55	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:50	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:23	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	(Start) 11/25/19 09:39 (End) 11/25/19 08:42	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B26 (0-5)

Lab Sample ID: 500-173686-15

Date Collected: 11/19/19 04:00

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 18:12	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 15:58	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:30	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 11:24	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:34	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:52	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 20:59	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 01:52	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:25	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B26 (5-10)

Lab Sample ID: 500-173686-16

Date Collected: 11/19/19 04:05

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 18:37	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 16:26	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:34	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 11:29	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:40	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			516880	11/22/19 11:45	GCA	TAL CHI
SPLP East	Prep	3010A			517066	11/24/19 16:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517520	11/26/19 21:56	EEN	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 21:04	JEF	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517068	11/24/19 16:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	517614	11/27/19 02:00	FXG	TAL CHI
TCLP	Leach	1311			516882	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 10:26	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516816	11/22/19 08:53	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B26 (10-15)

Lab Sample ID: 500-173686-17

Date Collected: 11/19/19 04:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517493	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518015	12/01/19 19:03	PMF	TAL CHI
Total/NA	Prep	3541			517923	11/29/19 16:14	ACK	TAL CHI
Total/NA	Analysis	8270D		1	518370	12/03/19 16:54	AJD	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 17:38	JEF	TAL CHI
Total/NA	Prep	3050B			518168	12/03/19 09:00	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 11:33	JEF	TAL CHI
Total/NA	Prep	7471B			517385	11/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517626	11/27/19 10:43	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173686-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1010A		Solid	Flashpoint
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7.3.4	7.3.4	Solid	Sulfide, Reactive
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
9014	9010B	Solid	Cyanide, Reactive
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-173686 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173686
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 4.6, 4.5

Client		Client Project #		Preservative		Parameter		Matrix		Comments			
<u>E+E</u>		<u>1009341.0447.01</u>								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other			
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM					
<u>176-001-W047E</u>		<u>Chicago, IL</u>				<u>AH JH</u>		<u>R. Wright</u>					
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total/TCLP Metals	PH	Percent Solids	Disposal Parameters	Comments
			Date	Time									
<u>1</u>		<u>2615V2-A1-B01(0-6)</u>	<u>11/19/19</u>	<u>0005</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>2</u>		<u>2615V2-A1-B01(6-12)</u>	<u>11/19/19</u>	<u>0016</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>3</u>		<u>2615V2-A1-B01(12-18)</u>	<u>11/19/19</u>	<u>0026</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>4</u>		<u>2615V2-A1-B01(18-24)</u>	<u>11/19/19</u>	<u>0033</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>5</u>		<u>2615V2-A1-B01(24-30)</u>	<u>11/19/19</u>	<u>0038</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>6</u>		<u>2615V2-A1-B02(0-6)</u>	<u>11/19/19</u>	<u>0134</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>7</u>		<u>2615V2-A1-B02(6-12)</u>	<u>11/19/19</u>	<u>0139</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>8</u>		<u>2615V2-A1-B02(12-18)</u>	<u>11/19/19</u>	<u>0150</u>	<u>7</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>9</u>		<u>2615V2-A1-B02(18-24)</u>	<u>11/19/19</u>	<u>0155</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>10</u>		<u>2615V2-A1-B02(24-30)</u>	<u>11/19/19</u>	<u>0200</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		

Turnaround Time Required (Business Days)
 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: <u>E+E</u> Date: <u>11/19/19</u> Time: <u>0930</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/19/19</u> Time: <u>0930</u>	Lab Courier: <u>TR</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/19/19</u> Time: <u>1040</u>	Received By: <u>[Signature]</u> Company: <u>TA-CRA</u> Date: <u>11/19/19</u> Time: <u>1040</u>	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-173686
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: 4.6, 4.5

Lab ID	MIS/MSD	Sample ID	Sampling		# of Containers	Matrix	Preservative	Parameter	VOC	SVOC	Total/TCAP Metals	pH	Percent Solids	Comments
			Date	Time										
11		2615V2-A1-B27(0-5)	11/19/19	0308	5	S			X	X	X	X	X	
		2615V2-A1-B27(10)												
12		2615V2-A1-B27(5-10)	11/19/19	0319	5	S			X	X	X	X	X	
13		2615V2-A1-B27(5-10)D	11/19/19	0319	5	S			X	X	X	X	X	
14		2615V2-A1-B27(10-15)	11/19/19	0325	5	S			X	X	X	X	X	
15		2615V2-A1-B26(0-5)	11/19/19	0400	5	S			X	X	X	X	X	
16		2615V2-A1-B26(5-10)	11/19/19	0405	5	S			X	X	X	X	X	
17		2615V2-A1-B26(10-15)	11/19/19	0415	5	S			X	X	X	X	X	

- Preservative Key
- HCL, Cool to 4°
 - H2SO4, Cool to 4°
 - HNO3, Cool to 4°
 - NaOH, Cool to 4°
 - NaOH/Zn, Cool to 4°
 - NaHSO4
 - Cool to 4°
 - None
 - Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>E+E</u>	Date: <u>11/19/19</u>	Time: <u>0930</u>	Received By: <u>[Signature]</u>	Company: <u>A</u>	Date: <u>11/19/19</u>	Time: <u>0930</u>
Relinquished By: <u>[Signature]</u>	Company: <u>IT</u>	Date: <u>11/19/19</u>	Time: <u>1040</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CHT</u>	Date: <u>11/19/19</u>	Time: <u>1040</u>

Lab Courier: TR
 Shipped: _____
 Hand Delivered: _____

Matrix Key

- | | |
|--------------------|---------------------|
| WW - Wastewater | SE - Sediment |
| W - Water | SO - Soil |
| S - Soil | L - Leachate |
| SL - Sludge | WI - Wipe |
| MS - Miscellaneous | DW - Drinking Water |
| OL - Oil | O - Other |
| A - Air | |

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173686-1

Login Number: 173686

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6,4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173687-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/5/2019 2:39:02 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Job ID: 500-173687-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173687-1

Receipt

The samples were received on 11/19/2019 10:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.5° C and 4.6° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-516923 and analytical batch 500-516963 recovered above the control limits for the following analytes: Nitrobenzene, Phenol, Isophorone, 2,2'-oxybis[1-chloropropane], 2-Methylphenol, N-Nitrosodi-n-propylamine, 2-Chlorophenol and Bis(2-chloroethoxy)methane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-517540 and analytical batch 500-517672 recovered outside control limits for the following analytes: Nitrobenzene, Isophorone and N-Nitrosodi-n-propylamine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The following samples contained one acid surrogate outside acceptance limits: 2615V2-01-B35 (0-6) (500-173687-1). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: 2615V2-01-B35 (0-6) (500-173687-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The continuing calibration verification (CCV) associated with batch 500-517762 recovered above the upper control limit for zinc. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 6010B: The method blank for preparation batch 500-518184 and analytical batch 500-518550 contained iron, magnesium, and lead above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The method blank for preparation batch 500-518184 and analytical batch 500-518550 contained iron and magnesium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The continuing calibration blank (CCB) for 500-518550 contained lead above the reporting limit (RL). Associated sample 2615V2-01-B35 (0-6) (500-173687-1), 2615V2-01-B39 (0-4) (500-173687-2) and 2615V2-01-B39 (4-8) (500-173687-3) was not re-analyzed because results were greater than 10X the value found in the CCB.

Method 6010B: The method blank for preparation batch 500-518184 and analytical batch 500-518695 contained magnesium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Job ID: 500-173687-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

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Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.017	J	0.018	0.0079	mg/Kg	1	☒		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (0-4) (Continued)

Lab Sample ID: 500-173687-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.040	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.033	J	0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.23		0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.019	J	0.037	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.037		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.079		0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.073		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.033	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.54	J B	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.8		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.87	B	0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.060	J	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	19		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	77	B ^	0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	40		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	4200		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.79		0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6		0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	2000		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.22	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.067		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.17	J B ^	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.011	J	0.040	0.0061	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.046	J	0.081	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.015	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.029	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.052		0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (4-8) (Continued)

Lab Sample ID: 500-173687-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.046		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.62	J B	1.3	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.63	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.63	0.072	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.83	B	0.25	0.059	mg/Kg	1	☼	6010B	Total/NA
Boron	21		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.069	J	0.13	0.023	mg/Kg	1	☼	6010B	Total/NA
Calcium	35000	B	13	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	19		0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	13	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	32	B ^	0.31	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000	B	6.3	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.63	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	40		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	4000		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.99		0.63	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.6		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		63	9.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.31	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.3	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.50		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.30	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J B ^	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.015	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.021	0.0070	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.18		0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J B	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.1		0.51	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	3.4		0.51	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.17	J B	0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.029	J	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	180000	B	100	17	mg/Kg	10	☼	6010B	Total/NA
Chromium	3.7		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Cobalt	0.96		0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Iron	2400	B	10	5.3	mg/Kg	1	☼	6010B	Total/NA
Lead	2.7		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	120000		51	26	mg/Kg	10	☼	6010B	Total/NA
Manganese	84		0.51	0.075	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B40 (0-6) (Continued)

Lab Sample ID: 500-173687-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	2.0		0.51	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750		26	9.1	mg/Kg	1	☼	6010B	Total/NA
Silver	0.41		0.26	0.066	mg/Kg	1	☼	6010B	Total/NA
Sodium	450		51	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	3.6		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	7.9		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.64		0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.0062	J	0.016	0.0054	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173687-2	2615V2-01-B39 (0-4)	Solid	11/18/19 23:15	11/19/19 10:40	
500-173687-3	2615V2-01-B39 (4-8)	Solid	11/18/19 23:19	11/19/19 10:40	
500-173687-4	2615V2-01-B40 (0-6)	Solid	11/18/19 23:37	11/19/19 10:40	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Acetone	0.017	J	0.018	0.0079	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/19/19 17:20	11/27/19 14:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/19/19 17:20	11/27/19 14:17	1
4-Bromofluorobenzene (Surr)	108		75 - 131	11/19/19 17:20	11/27/19 14:17	1
Dibromofluoromethane	90		75 - 126	11/19/19 17:20	11/27/19 14:17	1
Toluene-d8 (Surr)	96		75 - 124	11/19/19 17:20	11/27/19 14:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.084	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2-Methylphenol	<0.19	*	0.19	0.061	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.044	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
N-Nitrosodi-n-propylamine	<0.076	*	0.076	0.046	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2-Chlorophenol	<0.19	*	0.19	0.064	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Nitrobenzene	<0.037	*	0.037	0.0094	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Bis(2-chloroethoxy)methane	<0.19	*	0.19	0.039	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Isophorone	<0.19	*	0.19	0.042	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2-Methylnaphthalene	0.040	J	0.076	0.0069	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Acenaphthene	0.033	J	0.037	0.0068	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Phenanthrene	0.23		0.037	0.0053	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Anthracene	0.019	J	0.037	0.0063	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Fluoranthene	0.037		0.037	0.0070	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Pyrene	0.079		0.037	0.0075	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Benzof[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.073		0.037	0.010	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Benzo[g,h,i]perylene	0.033	J	0.037	0.012	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	11/22/19 16:05	11/28/19 04:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		31 - 166				11/22/19 16:05	11/28/19 04:18	1
Phenol-d5	81		30 - 153				11/22/19 16:05	11/28/19 04:18	1
Nitrobenzene-d5	99		37 - 147				11/22/19 16:05	11/28/19 04:18	1
2-Fluorobiphenyl	102		43 - 145				11/22/19 16:05	11/28/19 04:18	1
2,4,6-Tribromophenol	54		31 - 143				11/22/19 16:05	11/28/19 04:18	1
Terphenyl-d14	106		42 - 157				11/22/19 16:05	11/28/19 04:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J B	1.1	0.21	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Arsenic	6.8		0.54	0.18	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Barium	40		0.54	0.061	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Beryllium	0.87	B	0.22	0.050	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Boron	21		2.7	0.25	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Cadmium	0.060	J	0.11	0.019	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Calcium	51000	B	110	18	mg/Kg	☼	12/03/19 09:10	12/04/19 12:14	10
Chromium	19		0.54	0.27	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Cobalt	15		0.27	0.070	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Copper	27		0.54	0.15	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Iron	18000	B	11	5.6	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Lead	77	B ^	0.27	0.12	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Magnesium	22000	B	5.4	2.7	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Manganese	270		0.54	0.078	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Nickel	40		0.54	0.16	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Potassium	4200		27	9.5	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Selenium	0.79		0.54	0.32	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Silver	2.6		0.27	0.069	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Sodium	2000		54	8.0	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Thallium	1.2		0.54	0.27	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Vanadium	23		0.27	0.063	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1
Zinc	48		1.1	0.47	mg/Kg	☼	12/03/19 09:10	12/03/19 21:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 21:43	1
Boron	0.083	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:43	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 84.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Cobalt	0.026		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Iron	0.22	J	0.40	0.20	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Manganese	2.0		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Nickel	0.067		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Silver	<0.025		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 21:43	1
Zinc	0.17	J B ^	0.50	0.020	mg/L	-	11/24/19 16:20	11/27/19 21:43	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.13		0.025	0.010	mg/L	-	11/26/19 15:31	11/27/19 13:29	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/24/19 16:20	11/28/19 00:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/24/19 16:20	11/28/19 00:21	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/25/19 10:00	11/26/19 08:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.018	0.0060	mg/Kg	☼	11/27/19 13:05	11/29/19 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		11/22/19 17:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Date Collected: 11/18/19 23:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/19/19 17:20	11/27/19 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/19/19 17:20	11/27/19 14:43	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/19/19 17:20	11/27/19 14:43	1
Dibromofluoromethane	90		75 - 126	11/19/19 17:20	11/27/19 14:43	1
Toluene-d8 (Surr)	97		75 - 124	11/19/19 17:20	11/27/19 14:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Date Collected: 11/18/19 23:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
N-Nitrosodi-n-propylamine	<0.081	*	0.081	0.049	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Bis(2-chloroethoxy)methane	<0.20	*	0.20	0.041	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Naphthalene	0.011	J	0.040	0.0061	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2-Methylnaphthalene	0.046	J	0.081	0.0073	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Acenaphthene	0.015	J	0.040	0.0072	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Phenanthrene	0.16		0.040	0.0056	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Fluoranthene	0.029	J	0.040	0.0074	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Pyrene	0.052		0.040	0.0079	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Date Collected: 11/18/19 23:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.046		0.040	0.011	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/27/19 07:37	11/28/19 03:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166				11/27/19 07:37	11/28/19 03:50	1
Phenol-d5	62		30 - 153				11/27/19 07:37	11/28/19 03:50	1
Nitrobenzene-d5	84		37 - 147				11/27/19 07:37	11/28/19 03:50	1
2-Fluorobiphenyl	80		43 - 145				11/27/19 07:37	11/28/19 03:50	1
2,4,6-Tribromophenol	43		31 - 143				11/27/19 07:37	11/28/19 03:50	1
Terphenyl-d14	92		42 - 157				11/27/19 07:37	11/28/19 03:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	J B	1.3	0.24	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Arsenic	8.0		0.63	0.21	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Barium	38		0.63	0.072	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Beryllium	0.83	B	0.25	0.059	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Boron	21		3.1	0.29	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Cadmium	0.069	J	0.13	0.023	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Calcium	35000	B	13	2.1	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Chromium	19		0.63	0.31	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Cobalt	15		0.31	0.082	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Copper	31		0.63	0.18	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Iron	20000	B	13	6.5	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Lead	32	B ^	0.31	0.15	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Magnesium	19000	B	6.3	3.1	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Manganese	270		0.63	0.091	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Nickel	40		0.63	0.18	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Potassium	4000		31	11	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Selenium	0.99		0.63	0.37	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Silver	2.6		0.31	0.081	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Sodium	1100		63	9.3	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Thallium	1.2		0.63	0.31	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Vanadium	23		0.31	0.074	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1
Zinc	50		1.3	0.55	mg/Kg	☼	12/03/19 09:10	12/03/19 21:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 21:47	1
Boron	0.10	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Date Collected: 11/18/19 23:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 21:47	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:47	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:47	1
Iron	0.30	J	0.40	0.20	mg/L		11/24/19 16:20	11/27/19 21:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 21:47	1
Manganese	1.9		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:47	1
Nickel	0.049		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:47	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 21:47	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:47	1
Zinc	0.18	J B ^	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 21:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.015	J	0.025	0.010	mg/L		11/26/19 15:31	11/27/19 13:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 00:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 00:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 08:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.021	0.0070	mg/Kg	☼	11/27/19 13:05	11/29/19 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/22/19 17:13	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 93.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00075	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00096	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,1-Dichloroethane	<0.0022		0.0022	0.00077	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,1-Dichloroethene	<0.0022		0.0022	0.00077	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,2-Dichloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,2-Dichloropropane	<0.0022		0.0022	0.00058	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
2-Hexanone	<0.0056		0.0056	0.0017	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0017	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Acetone	<0.022		0.022	0.0097	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Bromodichloromethane	<0.0022		0.0022	0.00046	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Carbon tetrachloride	<0.0022		0.0022	0.00065	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Chlorobenzene	<0.0022		0.0022	0.00083	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Chloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Chloroform	<0.0022		0.0022	0.00078	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Chloromethane	<0.0056		0.0056	0.0022	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00063	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Dibromochloromethane	<0.0022		0.0022	0.00073	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00066	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Styrene	<0.0022		0.0022	0.00068	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Tetrachloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00099	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Trichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Vinyl acetate	<0.0056		0.0056	0.0019	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Vinyl chloride	<0.0022		0.0022	0.00099	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1
Xylenes, Total	<0.0045		0.0045	0.00072	mg/Kg	☼	11/19/19 17:20	11/27/19 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/19/19 17:20	11/27/19 15:09	1
4-Bromofluorobenzene (Surr)	98		75 - 131	11/19/19 17:20	11/27/19 15:09	1
Dibromofluoromethane	91		75 - 126	11/19/19 17:20	11/27/19 15:09	1
Toluene-d8 (Surr)	92		75 - 124	11/19/19 17:20	11/27/19 15:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18	*	0.18	0.079	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 93.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2-Methylphenol	<0.18	*	0.18	0.057	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,2'-oxybis[1-chloropropane]	<0.18	*	0.18	0.041	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
N-Nitrosodi-n-propylamine	<0.072	*	0.072	0.044	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2-Chlorophenol	<0.18	*	0.18	0.061	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Nitrobenzene	<0.035	*	0.035	0.0089	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Bis(2-chloroethoxy)methane	<0.18	*	0.18	0.036	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Isophorone	<0.18	*	0.18	0.040	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Phenanthrene	0.18		0.035	0.0050	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Fluoranthene	<0.035		0.035	0.0066	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Pyrene	<0.035		0.035	0.0071	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Benzof[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 93.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.035		0.035	0.0097	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Benzo[a]pyrene	<0.035		0.035	0.0069	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/22/19 16:05	11/26/19 03:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		31 - 166	11/22/19 16:05	11/26/19 03:33	1
Phenol-d5	84		30 - 153	11/22/19 16:05	11/26/19 03:33	1
Nitrobenzene-d5	92		37 - 147	11/22/19 16:05	11/26/19 03:33	1
2-Fluorobiphenyl	90		43 - 145	11/22/19 16:05	11/26/19 03:33	1
2,4,6-Tribromophenol	72		31 - 143	11/22/19 16:05	11/26/19 03:33	1
Terphenyl-d14	109		42 - 157	11/22/19 16:05	11/26/19 03:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J B	1.0	0.20	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Arsenic	2.1		0.51	0.18	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Barium	3.4		0.51	0.059	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Beryllium	0.17	J B	0.21	0.048	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Boron	16		2.6	0.24	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Cadmium	0.029	J	0.10	0.019	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Calcium	180000	B	100	17	mg/Kg	☼	12/03/19 09:10	12/04/19 12:23	10
Chromium	3.7		0.51	0.25	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Cobalt	0.96		0.26	0.067	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Copper	<0.51		0.51	0.14	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Iron	2400	B	10	5.3	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Lead	2.7		0.26	0.12	mg/Kg	☼	12/04/19 17:56	12/05/19 09:05	1
Magnesium	120000		51	26	mg/Kg	☼	12/03/19 09:10	12/04/19 12:23	10
Manganese	84		0.51	0.075	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Nickel	2.0		0.51	0.15	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Potassium	750		26	9.1	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Selenium	<0.51		0.51	0.30	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Silver	0.41		0.26	0.066	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Sodium	450		51	7.6	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Thallium	<0.51		0.51	0.26	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Vanadium	3.6		0.26	0.061	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1
Zinc	7.9		1.0	0.45	mg/Kg	☼	12/03/19 09:10	12/03/19 21:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 21:51	1
Boron	0.068	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:51	1

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Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 93.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 21:51	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:51	1
Cobalt	0.014	J	0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:51	1
Iron	0.64		0.40	0.20	mg/L		11/24/19 16:20	11/27/19 21:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 21:51	1
Manganese	0.26		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:51	1
Nickel	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:51	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 21:51	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:51	1
Zinc	<0.50	[^]	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 21:51	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/26/19 15:31	11/27/19 13:38	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 00:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 00:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 08:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0062	J	0.016	0.0054	mg/Kg	☼	11/27/19 13:05	11/29/19 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			11/22/19 17:19	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

GC/MS VOA

Prep Batch: 517494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	5035	
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	5035	
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	5035	
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	5035	

Analysis Batch: 517516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	8260B	517494
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	8260B	517494
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	8260B	517494
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	8260B	517494
MB 500-517516/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-517516/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 516923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	3541	
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	3541	
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	3541	
MB 500-516923/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-516923/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 516963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-516923/1-A	Method Blank	Total/NA	Solid	8270D	516923
LCS 500-516923/2-A	Lab Control Sample	Total/NA	Solid	8270D	516923

Analysis Batch: 517265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	8270D	516923
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	8270D	516923

Prep Batch: 517540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	3541	
MB 500-517540/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-517540/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 517672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	8270D	516923
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	8270D	517540
MB 500-517540/1-A	Method Blank	Total/NA	Solid	8270D	517540
LCS 500-517540/2-A	Lab Control Sample	Total/NA	Solid	8270D	517540

Metals

Leach Batch: 516884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	TCLP	Solid	1311	

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Metals (Continued)

Leach Batch: 516884 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-2	2615V2-01-B39 (0-4)	TCLP	Solid	1311	
500-173687-3	2615V2-01-B39 (4-8)	TCLP	Solid	1311	
500-173687-4	2615V2-01-B40 (0-6)	TCLP	Solid	1311	
LB 500-516884/1-B	Method Blank	TCLP	Solid	1311	
LB 500-516884/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 517069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	TCLP	Solid	3010A	516884
500-173687-2	2615V2-01-B39 (0-4)	TCLP	Solid	3010A	516884
500-173687-3	2615V2-01-B39 (4-8)	TCLP	Solid	3010A	516884
500-173687-4	2615V2-01-B40 (0-6)	TCLP	Solid	3010A	516884
LB 500-516884/1-B	Method Blank	TCLP	Solid	3010A	516884
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 517187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	TCLP	Solid	7470A	516884
500-173687-2	2615V2-01-B39 (0-4)	TCLP	Solid	7470A	516884
500-173687-3	2615V2-01-B39 (4-8)	TCLP	Solid	7470A	516884
500-173687-4	2615V2-01-B40 (0-6)	TCLP	Solid	7470A	516884
LB 500-516884/1-C	Method Blank	TCLP	Solid	7470A	516884
MB 500-517187/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-517187/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Leach Batch: 517216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	SPLP East	Solid	1312	
500-173687-2	2615V2-01-B39 (0-4)	SPLP East	Solid	1312	
500-173687-3	2615V2-01-B39 (4-8)	SPLP East	Solid	1312	
500-173687-4	2615V2-01-B40 (0-6)	SPLP East	Solid	1312	
LB 500-517216/1-B	Method Blank	SPLP East	Solid	1312	

Analysis Batch: 517394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	TCLP	Solid	7470A	517187
500-173687-2	2615V2-01-B39 (0-4)	TCLP	Solid	7470A	517187
500-173687-3	2615V2-01-B39 (4-8)	TCLP	Solid	7470A	517187
500-173687-4	2615V2-01-B40 (0-6)	TCLP	Solid	7470A	517187
LB 500-516884/1-C	Method Blank	TCLP	Solid	7470A	517187
MB 500-517187/12-A	Method Blank	Total/NA	Solid	7470A	517187
LCS 500-517187/13-A	Lab Control Sample	Total/NA	Solid	7470A	517187

Prep Batch: 517445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	SPLP East	Solid	3010A	517216
500-173687-2	2615V2-01-B39 (0-4)	SPLP East	Solid	3010A	517216
500-173687-3	2615V2-01-B39 (4-8)	SPLP East	Solid	3010A	517216
500-173687-4	2615V2-01-B40 (0-6)	SPLP East	Solid	3010A	517216
LB 500-517216/1-B	Method Blank	SPLP East	Solid	3010A	517216
LCS 500-517445/2-A	Lab Control Sample	Total/NA	Solid	3010A	

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Metals

Prep Batch: 517617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	7471B	
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	7471B	
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	7471B	
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	7471B	
MB 500-517617/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-517617/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 517762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	TCLP	Solid	6010B	517069
500-173687-2	2615V2-01-B39 (0-4)	TCLP	Solid	6010B	517069
500-173687-3	2615V2-01-B39 (4-8)	TCLP	Solid	6010B	517069
500-173687-4	2615V2-01-B40 (0-6)	TCLP	Solid	6010B	517069
LB 500-516884/1-B	Method Blank	TCLP	Solid	6010B	517069
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	6010B	517069

Analysis Batch: 517765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	SPLP East	Solid	6010B	517445
500-173687-2	2615V2-01-B39 (0-4)	SPLP East	Solid	6010B	517445
500-173687-3	2615V2-01-B39 (4-8)	SPLP East	Solid	6010B	517445
500-173687-4	2615V2-01-B40 (0-6)	SPLP East	Solid	6010B	517445
LB 500-517216/1-B	Method Blank	SPLP East	Solid	6010B	517445
LCS 500-517445/2-A	Lab Control Sample	Total/NA	Solid	6010B	517445

Analysis Batch: 517827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	TCLP	Solid	6020A	517069
500-173687-2	2615V2-01-B39 (0-4)	TCLP	Solid	6020A	517069
500-173687-3	2615V2-01-B39 (4-8)	TCLP	Solid	6020A	517069
500-173687-4	2615V2-01-B40 (0-6)	TCLP	Solid	6020A	517069
LB 500-516884/1-B	Method Blank	TCLP	Solid	6020A	517069
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	6020A	517069

Analysis Batch: 517838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	7471B	517617
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	7471B	517617
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	7471B	517617
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	7471B	517617
MB 500-517617/12-A	Method Blank	Total/NA	Solid	7471B	517617
LCS 500-517617/13-A	Lab Control Sample	Total/NA	Solid	7471B	517617

Analysis Batch: 517892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	6010B	517069

Prep Batch: 518184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	3050B	
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Metals (Continued)

Prep Batch: 518184 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	3050B	
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	3050B	
MB 500-518184/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518184/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 518550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	6010B	518184
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	6010B	518184
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	6010B	518184
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	6010B	518184
MB 500-518184/1-A	Method Blank	Total/NA	Solid	6010B	518184
LCS 500-518184/2-A	Lab Control Sample	Total/NA	Solid	6010B	518184

Analysis Batch: 518695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	6010B	518184
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	6010B	518184

Prep Batch: 518771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	3050B	
MB 500-518771/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518771/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 518947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	6010B	518771
MB 500-518771/1-A	Method Blank	Total/NA	Solid	6010B	518771
LCS 500-518771/2-A	Lab Control Sample	Total/NA	Solid	6010B	518771

General Chemistry

Analysis Batch: 516692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	Moisture	
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	Moisture	
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	Moisture	
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	Moisture	
500-173687-4 DU	2615V2-01-B40 (0-6)	Total/NA	Solid	Moisture	

Analysis Batch: 516869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173687-1	2615V2-01-B35 (0-6)	Total/NA	Solid	9045D	
500-173687-2	2615V2-01-B39 (0-4)	Total/NA	Solid	9045D	
500-173687-3	2615V2-01-B39 (4-8)	Total/NA	Solid	9045D	
500-173687-4	2615V2-01-B40 (0-6)	Total/NA	Solid	9045D	
LCS 500-516869/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-516869/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173687-2 DU	2615V2-01-B39 (0-4)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-173687-1	2615V2-01-B35 (0-6)	95	105	89	97
500-173687-2	2615V2-01-B39 (0-4)	95	108	90	96
500-173687-3	2615V2-01-B39 (4-8)	95	106	90	97
500-173687-4	2615V2-01-B40 (0-6)	95	98	91	92
LCS 500-517516/4	Lab Control Sample	86	96	85	94
MB 500-517516/6	Method Blank	91	101	86	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173687-1	2615V2-01-B35 (0-6)	48	40	56	67	25 X	76
500-173687-2	2615V2-01-B39 (0-4)	85	81	99	102	54	106
500-173687-3	2615V2-01-B39 (4-8)	64	62	84	80	43	92
500-173687-4	2615V2-01-B40 (0-6)	80	84	92	90	72	109
LCS 500-516923/2-A	Lab Control Sample	135	123	101	102	94	103
LCS 500-517540/2-A	Lab Control Sample	85	85	111	102	82	98
MB 500-516923/1-A	Method Blank	132	118	99	100	64	104
MB 500-517540/1-A	Method Blank	75	72	98	91	63	97

Surrogate Legend

2FP = 2-Fluorophenol

PHL = Phenol-d5

NBZ = Nitrobenzene-d5

FBP = 2-Fluorobiphenyl

TBP = 2,4,6-Tribromophenol

TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-517516/6
Matrix: Solid
Analysis Batch: 517516

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/27/19 09:59	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/27/19 09:59	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/27/19 09:59	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/27/19 09:59	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/27/19 09:59	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/27/19 09:59	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/27/19 09:59	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/27/19 09:59	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/27/19 09:59	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/27/19 09:59	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/27/19 09:59	1
Acetone	<0.020		0.020	0.0087	mg/Kg			11/27/19 09:59	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/27/19 09:59	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/27/19 09:59	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/27/19 09:59	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/27/19 09:59	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/27/19 09:59	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/27/19 09:59	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/27/19 09:59	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/27/19 09:59	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/27/19 09:59	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/27/19 09:59	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/27/19 09:59	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/27/19 09:59	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/27/19 09:59	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/27/19 09:59	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/27/19 09:59	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/27/19 09:59	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/27/19 09:59	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/27/19 09:59	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/27/19 09:59	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/27/19 09:59	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/27/19 09:59	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/27/19 09:59	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/27/19 09:59	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/27/19 09:59	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/27/19 09:59	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	91		70 - 134		11/27/19 09:59	1
4-Bromofluorobenzene (Surr)	101		75 - 131		11/27/19 09:59	1
Dibromofluoromethane	86		75 - 126		11/27/19 09:59	1
Toluene-d8 (Surr)	93		75 - 124		11/27/19 09:59	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517516/4

Matrix: Solid

Analysis Batch: 517516

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0462		mg/Kg		92	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0455		mg/Kg		91	70 - 122
1,1,2-Trichloroethane	0.0500	0.0468		mg/Kg		94	70 - 125
1,1-Dichloroethane	0.0500	0.0439		mg/Kg		88	70 - 125
1,1-Dichloroethene	0.0500	0.0472		mg/Kg		94	70 - 120
1,2-Dichloroethane	0.0500	0.0455		mg/Kg		91	70 - 130
1,2-Dichloropropane	0.0500	0.0450		mg/Kg		90	70 - 125
2-Butanone (MEK)	0.0500	0.0401		mg/Kg		80	47 - 138
2-Hexanone	0.0500	0.0417		mg/Kg		83	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0395		mg/Kg		79	50 - 148
Acetone	0.0500	0.0437		mg/Kg		87	40 - 150
Benzene	0.0500	0.0461		mg/Kg		92	70 - 125
Bromodichloromethane	0.0500	0.0443		mg/Kg		89	67 - 129
Bromoform	0.0500	0.0409		mg/Kg		82	68 - 136
Bromomethane	0.0500	0.0457		mg/Kg		91	70 - 130
Carbon disulfide	0.0500	0.0450		mg/Kg		90	70 - 129
Carbon tetrachloride	0.0500	0.0467		mg/Kg		93	75 - 125
Chlorobenzene	0.0500	0.0493		mg/Kg		99	50 - 150
Chloroethane	0.0500	0.0386		mg/Kg		77	75 - 125
Chloroform	0.0500	0.0438		mg/Kg		88	57 - 135
Chloromethane	0.0500	0.0454		mg/Kg		91	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0442		mg/Kg		88	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0466		mg/Kg		93	70 - 125
Dibromochloromethane	0.0500	0.0430		mg/Kg		86	69 - 125
Ethylbenzene	0.0500	0.0474		mg/Kg		95	61 - 136
Methyl tert-butyl ether	0.0500	0.0449		mg/Kg		90	50 - 140
Methylene Chloride	0.0500	0.0437		mg/Kg		87	70 - 126
Styrene	0.0500	0.0467		mg/Kg		93	70 - 125
Tetrachloroethene	0.0500	0.0485		mg/Kg		97	70 - 124
Toluene	0.0500	0.0480		mg/Kg		96	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0471		mg/Kg		94	70 - 125
Trichloroethene	0.0500	0.0479		mg/Kg		96	70 - 125
Vinyl acetate	0.0500	0.0359		mg/Kg		72	40 - 153
Vinyl chloride	0.0500	0.0460		mg/Kg		92	70 - 125
Xylenes, Total	0.100	0.0951		mg/Kg		95	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	85		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-516923/1-A
Matrix: Solid
Analysis Batch: 516963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516923

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/22/19 16:05	11/23/19 12:27	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-516923/1-A
Matrix: Solid
Analysis Batch: 516963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/22/19 16:05	11/23/19 12:27	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/22/19 16:05	11/23/19 12:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	132		31 - 166	11/22/19 16:05	11/23/19 12:27	1
Phenol-d5	118		30 - 153	11/22/19 16:05	11/23/19 12:27	1
Nitrobenzene-d5	99		37 - 147	11/22/19 16:05	11/23/19 12:27	1
2-Fluorobiphenyl	100		43 - 145	11/22/19 16:05	11/23/19 12:27	1
2,4,6-Tribromophenol	64		31 - 143	11/22/19 16:05	11/23/19 12:27	1
Terphenyl-d14	104		42 - 157	11/22/19 16:05	11/23/19 12:27	1

Lab Sample ID: LCS 500-516923/2-A
Matrix: Solid
Analysis Batch: 516963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.77	*	mg/Kg		133	56 - 122
Bis(2-chloroethyl)ether	1.33	1.44		mg/Kg		108	55 - 111
1,3-Dichlorobenzene	1.33	1.34		mg/Kg		101	65 - 124
1,4-Dichlorobenzene	1.33	1.34		mg/Kg		101	61 - 110
1,2-Dichlorobenzene	1.33	1.34		mg/Kg		101	62 - 110
2-Methylphenol	1.33	1.72	*	mg/Kg		129	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	2.05	*	mg/Kg		154	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.64	*	mg/Kg		123	56 - 118
Hexachloroethane	1.33	1.40		mg/Kg		105	60 - 114
2-Chlorophenol	1.33	1.49	*	mg/Kg		112	64 - 110
Nitrobenzene	1.33	1.56	*	mg/Kg		117	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.54	*	mg/Kg		116	60 - 112
1,2,4-Trichlorobenzene	1.33	1.36		mg/Kg		102	66 - 117
Isophorone	1.33	1.53	*	mg/Kg		114	55 - 110
2,4-Dimethylphenol	1.33	1.35		mg/Kg		102	60 - 110
Hexachlorobutadiene	1.33	1.33		mg/Kg		100	56 - 120
Naphthalene	1.33	1.44		mg/Kg		108	63 - 110
2,4-Dichlorophenol	1.33	1.40		mg/Kg		105	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516923/2-A

Matrix: Solid

Analysis Batch: 516963

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 516923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.36		mg/Kg		102	30 - 150
2,4,6-Trichlorophenol	1.33	1.31		mg/Kg		98	57 - 120
2,4,5-Trichlorophenol	1.33	1.32		mg/Kg		99	50 - 120
Hexachlorocyclopentadiene	1.33	0.428	J	mg/Kg		32	10 - 133
2-Methylnaphthalene	1.33	1.41		mg/Kg		106	69 - 112
2-Nitroaniline	1.33	1.60		mg/Kg		120	57 - 124
2-Chloronaphthalene	1.33	1.44		mg/Kg		108	69 - 114
4-Chloro-3-methylphenol	1.33	1.42		mg/Kg		107	65 - 122
2,6-Dinitrotoluene	1.33	1.49		mg/Kg		112	70 - 123
2-Nitrophenol	1.33	1.42		mg/Kg		106	60 - 120
3-Nitroaniline	1.33	1.19		mg/Kg		89	40 - 122
Dimethyl phthalate	1.33	1.45		mg/Kg		109	69 - 116
2,4-Dinitrophenol	2.67	1.24		mg/Kg		47	10 - 100
Acenaphthylene	1.33	1.46		mg/Kg		109	68 - 120
2,4-Dinitrotoluene	1.33	1.51		mg/Kg		113	69 - 124
Acenaphthene	1.33	1.44		mg/Kg		108	65 - 124
Dibenzofuran	1.33	1.46		mg/Kg		109	66 - 115
4-Nitrophenol	2.67	2.93		mg/Kg		110	30 - 122
Fluorene	1.33	1.47		mg/Kg		111	62 - 120
4-Nitroaniline	1.33	1.39		mg/Kg		104	60 - 160
4-Bromophenyl phenyl ether	1.33	1.38		mg/Kg		103	68 - 118
Hexachlorobenzene	1.33	1.40		mg/Kg		105	63 - 124
Diethyl phthalate	1.33	1.49		mg/Kg		112	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.37		mg/Kg		102	62 - 119
Pentachlorophenol	2.67	1.97		mg/Kg		74	13 - 112
N-Nitrosodiphenylamine	1.33	1.45		mg/Kg		109	65 - 112
4,6-Dinitro-2-methylphenol	2.67	2.03		mg/Kg		76	10 - 110
Phenanthrene	1.33	1.47		mg/Kg		111	62 - 120
Anthracene	1.33	1.47		mg/Kg		110	70 - 114
Carbazole	1.33	1.56		mg/Kg		117	65 - 142
Di-n-butyl phthalate	1.33	1.57		mg/Kg		117	65 - 120
Fluoranthene	1.33	1.46		mg/Kg		109	62 - 120
Pyrene	1.33	1.54		mg/Kg		116	61 - 128
Butyl benzyl phthalate	1.33	1.61		mg/Kg		121	71 - 129
Benzo[a]anthracene	1.33	1.40		mg/Kg		105	67 - 122
Chrysene	1.33	1.39		mg/Kg		105	63 - 120
3,3'-Dichlorobenzidine	1.33	1.06		mg/Kg		80	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.62		mg/Kg		121	72 - 131
Di-n-octyl phthalate	1.33	1.55		mg/Kg		116	68 - 134
Benzo[b]fluoranthene	1.33	1.50		mg/Kg		113	69 - 129
Benzo[k]fluoranthene	1.33	1.38		mg/Kg		103	68 - 127
Benzo[a]pyrene	1.33	1.51		mg/Kg		113	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.44		mg/Kg		108	68 - 130
Dibenz(a,h)anthracene	1.33	1.40		mg/Kg		105	64 - 131
Benzo[g,h,i]perylene	1.33	1.50		mg/Kg		113	72 - 131
3 & 4 Methylphenol	1.33	1.56		mg/Kg		117	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-516923/2-A
Matrix: Solid
Analysis Batch: 516963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516923

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	135		31 - 166
Phenol-d5	123		30 - 153
Nitrobenzene-d5	101		37 - 147
2-Fluorobiphenyl	102		43 - 145
2,4,6-Tribromophenol	94		31 - 143
Terphenyl-d14	103		42 - 157

Lab Sample ID: MB 500-517540/1-A
Matrix: Solid
Analysis Batch: 517672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517540

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Isophorone	<0.17		0.17	0.037	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		11/27/19 07:37	11/28/19 01:03	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-517540/1-A
Matrix: Solid
Analysis Batch: 517672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517540

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.033		0.033	0.0047	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Carbazole	<0.17		0.17	0.083	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		11/27/19 07:37	11/28/19 01:03	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		11/27/19 07:37	11/28/19 01:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	75		31 - 166	11/27/19 07:37	11/28/19 01:03	1
Phenol-d5	72		30 - 153	11/27/19 07:37	11/28/19 01:03	1
Nitrobenzene-d5	98		37 - 147	11/27/19 07:37	11/28/19 01:03	1
2-Fluorobiphenyl	91		43 - 145	11/27/19 07:37	11/28/19 01:03	1
2,4,6-Tribromophenol	63		31 - 143	11/27/19 07:37	11/28/19 01:03	1
Terphenyl-d14	97		42 - 157	11/27/19 07:37	11/28/19 01:03	1

Lab Sample ID: LCS 500-517540/2-A
Matrix: Solid
Analysis Batch: 517672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517540

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.20		mg/Kg		90	56 - 122
Bis(2-chloroethyl)ether	1.33	1.41		mg/Kg		106	55 - 111
1,3-Dichlorobenzene	1.33	1.19		mg/Kg		89	65 - 124
1,4-Dichlorobenzene	1.33	1.16		mg/Kg		87	61 - 110
1,2-Dichlorobenzene	1.33	1.22		mg/Kg		92	62 - 110
2-Methylphenol	1.33	1.38		mg/Kg		103	60 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517540/2-A

Matrix: Solid

Analysis Batch: 517672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 517540

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	1.33	0.741		mg/Kg		56	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.58	*	mg/Kg		119	56 - 118
Hexachloroethane	1.33	1.33		mg/Kg		100	60 - 114
2-Chlorophenol	1.33	1.20		mg/Kg		90	64 - 110
Nitrobenzene	1.33	1.58	*	mg/Kg		118	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.51	*	mg/Kg		114	60 - 112
1,2,4-Trichlorobenzene	1.33	1.39		mg/Kg		104	66 - 117
Isophorone	1.33	1.58	*	mg/Kg		118	55 - 110
2,4-Dimethylphenol	1.33	1.41		mg/Kg		106	60 - 110
Hexachlorobutadiene	1.33	1.54		mg/Kg		116	56 - 120
Naphthalene	1.33	1.31		mg/Kg		98	63 - 110
2,4-Dichlorophenol	1.33	1.38		mg/Kg		104	58 - 120
4-Chloroaniline	1.33	1.27		mg/Kg		96	30 - 150
2,4,6-Trichlorophenol	1.33	1.37		mg/Kg		103	57 - 120
2,4,5-Trichlorophenol	1.33	1.37		mg/Kg		103	50 - 120
Hexachlorocyclopentadiene	1.33	0.695		mg/Kg		52	10 - 133
2-Methylnaphthalene	1.33	1.34		mg/Kg		100	69 - 112
2-Nitroaniline	1.33	1.50		mg/Kg		112	57 - 124
2-Chloronaphthalene	1.33	1.33		mg/Kg		100	69 - 114
4-Chloro-3-methylphenol	1.33	1.51		mg/Kg		113	65 - 122
2,6-Dinitrotoluene	1.33	1.44		mg/Kg		108	70 - 123
2-Nitrophenol	1.33	1.32		mg/Kg		99	60 - 120
3-Nitroaniline	1.33	1.09		mg/Kg		81	40 - 122
Dimethyl phthalate	1.33	1.34		mg/Kg		101	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		19	10 - 100
Acenaphthylene	1.33	1.32		mg/Kg		99	68 - 120
2,4-Dinitrotoluene	1.33	1.49		mg/Kg		112	69 - 124
Acenaphthene	1.33	1.34		mg/Kg		101	65 - 124
Dibenzofuran	1.33	1.40		mg/Kg		105	66 - 115
4-Nitrophenol	2.67	3.13		mg/Kg		117	30 - 122
Fluorene	1.33	1.39		mg/Kg		105	62 - 120
4-Nitroaniline	1.33	1.32		mg/Kg		99	60 - 160
4-Bromophenyl phenyl ether	1.33	1.35		mg/Kg		101	68 - 118
Hexachlorobenzene	1.33	1.26		mg/Kg		94	63 - 124
Diethyl phthalate	1.33	1.38		mg/Kg		103	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.47		mg/Kg		110	62 - 119
Pentachlorophenol	2.67	1.74		mg/Kg		65	13 - 112
N-Nitrosodiphenylamine	1.33	1.34		mg/Kg		100	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.18		mg/Kg		44	10 - 110
Phenanthrene	1.33	1.34		mg/Kg		101	62 - 120
Anthracene	1.33	1.36		mg/Kg		102	70 - 114
Carbazole	1.33	1.42		mg/Kg		107	65 - 142
Di-n-butyl phthalate	1.33	1.33		mg/Kg		100	65 - 120
Fluoranthene	1.33	1.34		mg/Kg		100	62 - 120
Pyrene	1.33	1.41		mg/Kg		105	61 - 128
Butyl benzyl phthalate	1.33	1.32		mg/Kg		99	71 - 129
Benzo[a]anthracene	1.33	1.38		mg/Kg		103	67 - 122
Chrysene	1.33	1.41		mg/Kg		106	63 - 120
3,3'-Dichlorobenzidine	1.33	1.14		mg/Kg		85	35 - 128

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517540/2-A
Matrix: Solid
Analysis Batch: 517672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517540

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	1.33	1.36		mg/Kg		102	72 - 131
Di-n-octyl phthalate	1.33	1.26		mg/Kg		94	68 - 134
Benzo[b]fluoranthene	1.33	1.36		mg/Kg		102	69 - 129
Benzo[k]fluoranthene	1.33	1.42		mg/Kg		107	68 - 127
Benzo[a]pyrene	1.33	1.46		mg/Kg		109	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.56		mg/Kg		117	68 - 130
Dibenz(a,h)anthracene	1.33	1.45		mg/Kg		109	64 - 131
Benzo[g,h,i]perylene	1.33	1.40		mg/Kg		105	72 - 131
3 & 4 Methylphenol	1.33	1.38		mg/Kg		104	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	85		31 - 166
Phenol-d5	85		30 - 153
Nitrobenzene-d5	111		37 - 147
2-Fluorobiphenyl	102		43 - 145
2,4,6-Tribromophenol	82		31 - 143
Terphenyl-d14	98		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-517069/2-A
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.520		mg/L		104	80 - 120
Beryllium	0.0500	0.0528		mg/L		106	80 - 120
Boron	1.00	0.917		mg/L		92	80 - 120
Cadmium	0.0500	0.0491		mg/L		98	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.500	0.519		mg/L		104	80 - 120
Lead	0.100	0.0966		mg/L		97	80 - 120
Manganese	0.500	0.525		mg/L		105	80 - 120
Nickel	0.500	0.518		mg/L		104	80 - 120
Selenium	0.100	0.0930		mg/L		93	80 - 120
Silver	0.0500	0.0482		mg/L		96	80 - 120
Zinc	0.500	0.519	^	mg/L		104	80 - 120

Lab Sample ID: LCS 500-517069/2-A
Matrix: Solid
Analysis Batch: 517892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.00	0.943		mg/L		94	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-517445/2-A
Matrix: Solid
Analysis Batch: 517765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517445
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.547		mg/L		109	80 - 120

Lab Sample ID: MB 500-518184/1-A
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.516	J	2.0	0.39	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Barium	<1.0		1.0	0.11	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Beryllium	0.135	J	0.40	0.093	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Boron	<5.0		5.0	0.47	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Cadmium	<0.20		0.20	0.036	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Calcium	7.51	J	20	3.4	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Copper	<1.0		1.0	0.28	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Iron	22.8		20	10	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Lead	1.26		0.50	0.23	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Magnesium	10.5		10	5.0	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Potassium	<50		50	18	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Silver	<0.50		0.50	0.13	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Sodium	<100		100	15	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/03/19 09:10	12/03/19 20:08	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/03/19 09:10	12/03/19 20:08	1

Lab Sample ID: LCS 500-518184/2-A
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518184
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	48.4		mg/Kg		97	80 - 120
Arsenic	10.0	9.26		mg/Kg		93	80 - 120
Barium	200	191		mg/Kg		95	80 - 120
Beryllium	5.00	4.65		mg/Kg		93	80 - 120
Boron	100	86.5		mg/Kg		87	80 - 120
Cadmium	5.00	4.54		mg/Kg		91	80 - 120
Calcium	1000	934		mg/Kg		93	80 - 120
Chromium	20.0	19.1		mg/Kg		95	80 - 120
Cobalt	50.0	47.7		mg/Kg		95	80 - 120
Copper	25.0	24.1		mg/Kg		96	80 - 120
Iron	100	113		mg/Kg		113	80 - 120
Lead	10.0	9.28		mg/Kg		93	80 - 120
Magnesium	1000	926		mg/Kg		93	80 - 120
Manganese	50.0	46.1		mg/Kg		92	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518184/2-A
Matrix: Solid
Analysis Batch: 518550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	50.0	48.2		mg/Kg		96	80 - 120
Potassium	1000	977		mg/Kg		98	80 - 120
Selenium	10.0	8.15		mg/Kg		81	80 - 120
Silver	5.00	4.48		mg/Kg		90	80 - 120
Sodium	1000	991		mg/Kg		99	80 - 120
Thallium	10.0	9.20		mg/Kg		92	80 - 120
Vanadium	50.0	46.8		mg/Kg		94	80 - 120
Zinc	50.0	46.5		mg/Kg		93	80 - 120

Lab Sample ID: MB 500-518771/1-A
Matrix: Solid
Analysis Batch: 518947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518771

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50	0.23	mg/Kg		12/04/19 17:56	12/05/19 08:57	1

Lab Sample ID: LCS 500-518771/2-A
Matrix: Solid
Analysis Batch: 518947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	10.0	10.1		mg/Kg		101	80 - 120

Lab Sample ID: LB 500-516884/1-B
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 21:31	1
Boron	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 21:31	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Cobalt	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Iron	<0.40		0.40	0.20	mg/L		11/24/19 16:20	11/27/19 21:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 21:31	1
Manganese	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Nickel	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 21:31	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Zinc	0.0433	J ^	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 21:31	1

Lab Sample ID: LB 500-517216/1-B
Matrix: Solid
Analysis Batch: 517765

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 517445

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		11/26/19 15:31	11/27/19 13:21	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-517069/2-A
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517069
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.526		mg/L		105	80 - 120
Thallium	0.100	0.0921		mg/L		92	80 - 120

Lab Sample ID: LB 500-516884/1-B
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 00:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 00:14	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-517187/12-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 08:38	1

Lab Sample ID: LCS 500-517187/13-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517187
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00206		mg/L		103	80 - 120

Lab Sample ID: LB 500-516884/1-C
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517187

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 08:41	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-517617/12-A
Matrix: Solid
Analysis Batch: 517838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517617

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		11/27/19 13:05	11/29/19 09:32	1

Lab Sample ID: LCS 500-517617/13-A
Matrix: Solid
Analysis Batch: 517838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517617
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Method: 9045D - pH

Lab Sample ID: 500-173687-2 DU
Matrix: Solid
Analysis Batch: 516869

Client Sample ID: 2615V2-01-B39 (0-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.0		8.0		SU		0.3	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B35 (0-6)

Lab Sample ID: 500-173687-1

Date Collected: 11/18/19 22:55

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:25	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 21:39	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:19	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:43	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516869	(Start) 11/22/19 16:52 (End) 11/22/19 16:58	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	516692	11/21/19 15:57	LWN	TAL CHI

Client Sample ID: 2615V2-01-B35 (0-6)

Lab Sample ID: 500-173687-1

Date Collected: 11/18/19 22:55

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517494	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517516	11/27/19 13:51	PMF	TAL CHI
Total/NA	Prep	3541			516923	11/22/19 16:05	JP1	TAL CHI
Total/NA	Analysis	8270D		5	517265	11/26/19 04:19	NRJ	TAL CHI
Total/NA	Prep	3050B			518184	12/03/19 09:10	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 21:08	JEF	TAL CHI
Total/NA	Prep	7471B			517617	11/27/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517838	11/29/19 09:40	MJG	TAL CHI

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:29	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 21:43	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:21	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:45	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516869		SMO	TAL CHI
					(Start)	11/22/19 17:03		
					(End)	11/22/19 17:08		
Total/NA	Analysis	Moisture		1	516692	11/21/19 15:57	LWN	TAL CHI

Client Sample ID: 2615V2-01-B39 (0-4)

Lab Sample ID: 500-173687-2

Date Collected: 11/18/19 23:15

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517494	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517516	11/27/19 14:17	PMF	TAL CHI
Total/NA	Prep	3541			516923	11/22/19 16:05	JP1	TAL CHI
Total/NA	Analysis	8270D		1	517672	11/28/19 04:18	NRJ	TAL CHI
Total/NA	Prep	3050B			518184	12/03/19 09:10	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 21:20	JEF	TAL CHI
Total/NA	Prep	3050B			518184	12/03/19 09:10	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 12:14	JEF	TAL CHI
Total/NA	Prep	7471B			517617	11/27/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517838	11/29/19 09:42	MJG	TAL CHI

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Date Collected: 11/18/19 23:19

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:34	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 21:47	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:24	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516869		SMO	TAL CHI
					(Start)	11/22/19 17:13		
					(End)	11/22/19 17:19		
Total/NA	Analysis	Moisture		1	516692	11/21/19 15:57	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B39 (4-8)

Lab Sample ID: 500-173687-3

Date Collected: 11/18/19 23:19

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517494	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517516	11/27/19 14:43	PMF	TAL CHI
Total/NA	Prep	3541			517540	11/27/19 07:37	DX	TAL CHI
Total/NA	Analysis	8270D		1	517672	11/28/19 03:50	NRJ	TAL CHI
Total/NA	Prep	3050B			518184	12/03/19 09:10	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 21:24	JEF	TAL CHI
Total/NA	Prep	7471B			517617	11/27/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517838	11/29/19 09:44	MJG	TAL CHI

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:38	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 21:51	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:26	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	516869	(Start) 11/22/19 17:19 (End) 11/22/19 17:24	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	516692	11/21/19 15:57	LWN	TAL CHI

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517494	11/19/19 17:20	WRE	TAL CHI
Total/NA	Analysis	8260B		1	517516	11/27/19 15:09	PMF	TAL CHI
Total/NA	Prep	3541			516923	11/22/19 16:05	JP1	TAL CHI
Total/NA	Analysis	8270D		1	517265	11/26/19 03:33	NRJ	TAL CHI
Total/NA	Prep	3050B			518184	12/03/19 09:10	LMN	TAL CHI
Total/NA	Analysis	6010B		1	518550	12/03/19 21:28	JEF	TAL CHI
Total/NA	Prep	3050B			518771	12/04/19 17:56	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518947	12/05/19 09:05	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Client Sample ID: 2615V2-01-B40 (0-6)

Lab Sample ID: 500-173687-4

Date Collected: 11/18/19 23:37

Matrix: Solid

Date Received: 11/19/19 10:40

Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518184	12/03/19 09:10	LMN	TAL CHI
Total/NA	Analysis	6010B		10	518695	12/04/19 12:23	JEF	TAL CHI
Total/NA	Prep	7471B			517617	11/27/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	517838	11/29/19 09:47	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173687-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.



500-173687 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 580-173687
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 4.6, 4.5

Client		Client Project #		Preservative		Parameter												Preservative Key	
ELE		1009341.0447.01																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampler		Lab PM												Comments	
176-001-W047E				R. Wright				VOC		SVOC		Total/TCLP Metals		pH		Percent Solids			
Project Location/State		Lab Project #		Date		Time		# of Containers		Matrix									
Chicago, IL																			
Lab ID	MS/MSD	Sample ID		Date		Time		# of Containers		Matrix									
1		2615V2-01-B35(0-6)		11/19/19		2255		5 5		X X		X X		X X		X X			
2		2615V2-01-B39(0-4)		11/19/19		2315		5 5		X X		X X		X X		X X			
3		2615V2-01-B39(4-8)		11/19/19		2319		5 5		X X		X X		X X		X X			
4		2615V2-01-B40(0-6)		11/18/19		2337		5 5		X X		X X		X X		X X			

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other
 Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: ELE Date: 11/14/19 Time: 0930	Received By: <u>[Signature]</u> Company: TA Date: 11/19/19 Time: 0930	Lab Courier: <u>[Signature]</u>
Relinquished By: <u>[Signature]</u> Company: TA Date: 11/19/19 Time: 1040	Received By: <u>[Signature]</u> Company: TA-CPT Date: 11/19/19 Time: 1040	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments: _____
 Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173687-1

Login Number: 173687

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6,4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173762-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/9/2019 4:21:03 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Job ID: 500-173762-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173762-1

Receipt

The samples were received on 11/20/2019 12:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

GC/MS VOA

Method 8260B: One Surrogate (Dibromofluoromethane) recovery for the following sample was outside control limits: 2615V2-01-B06 (6-12) (500-173762-5). Evidence of matrix interference is present due to the basic pH 11 of the sample; therefore, no re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following samples contained one acid surrogate outside acceptance limits: 2615V2-01-B05 (6-12) (500-173762-2) and 2615V2-01-B04 (0-5) (500-173762-7). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following sample was outside control limits: 2615V2-01-B06 (0-6) (500-173762-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: Due to sample matrix effect on the internal standard's (ISTD's) from very large unknown ketone peaks, a dilution was required for the following sample: 2615V2-01-B06 (0-6) (500-173762-4).

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-518266 and analytical batch 500-518390 recovered outside control limits for the following analytes: Hexachloroethane, Isophorone, Nitrobenzene, N-Nitrosodi-n-propylamine, N-Nitrosodiphenylamine, Phenol, Butyl benzyl phthalate, Bis(2-chloroethyl)ether, Bis(2-chloroethoxy)methane, 2,2'-oxybis[1-chloropropane], 2-Methylphenol, 2-Nitroaniline and 2-Chlorophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following analyte was below the QC limits: 2,4-Dinitrophenol. No corrective action was required per SOP.

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-173762-E-1-G MS) and (500-173762-E-1-H MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The continuing calibration verification (CCV) associated with batch 500-517762 recovered above the upper control limit for zinc. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 6010B: The method blank for preparation batch 500-518507 and analytical batch 500-518808 contained Magnesium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The method blank for preparation batch 500-518507 and analytical batch 500-518953 contained magnesium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Job ID: 500-173762-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

- 1
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Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.032	J	0.038	0.0059	mg/Kg	1	☼	☼	8270D	Total/NA
2-Methylnaphthalene	0.040	J	0.077	0.0070	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthylene	0.025	J	0.038	0.0050	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthene	0.045		0.038	0.0069	mg/Kg	1	☼	☼	8270D	Total/NA
Fluorene	0.037	J	0.038	0.0054	mg/Kg	1	☼	☼	8270D	Total/NA
Phenanthrene	0.50		0.038	0.0053	mg/Kg	1	☼	☼	8270D	Total/NA
Anthracene	0.11		0.038	0.0064	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.84		0.038	0.0071	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.81		0.038	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.42		0.038	0.0052	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.42		0.038	0.010	mg/Kg	1	☼	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.071	J	0.19	0.070	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.56		0.038	0.0083	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.22		0.038	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]pyrene	0.39		0.038	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.038	0.0099	mg/Kg	1	☼	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.034	J	0.038	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.16		0.038	0.012	mg/Kg	1	☼	☼	8270D	Total/NA
Antimony	0.73	J B	1.1	0.22	mg/Kg	1	☼	☼	6010B	Total/NA
Arsenic	5.4		0.57	0.20	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	48		0.57	0.065	mg/Kg	1	☼	☼	6010B	Total/NA
Beryllium	0.49		0.23	0.053	mg/Kg	1	☼	☼	6010B	Total/NA
Boron	13		2.9	0.27	mg/Kg	1	☼	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.021	mg/Kg	1	☼	☼	6010B	Total/NA
Calcium	110000	B	110	19	mg/Kg	10	☼	☼	6010B	Total/NA
Chromium	12	B	0.57	0.28	mg/Kg	1	☼	☼	6010B	Total/NA
Cobalt	8.3		0.29	0.075	mg/Kg	1	☼	☼	6010B	Total/NA
Copper	20		0.57	0.16	mg/Kg	1	☼	☼	6010B	Total/NA
Iron	12000		11	6.0	mg/Kg	1	☼	☼	6010B	Total/NA
Lead	24		0.29	0.13	mg/Kg	1	☼	☼	6010B	Total/NA
Magnesium	61000	B	57	28	mg/Kg	10	☼	☼	6010B	Total/NA
Manganese	290		0.57	0.083	mg/Kg	1	☼	☼	6010B	Total/NA
Nickel	22		0.57	0.17	mg/Kg	1	☼	☼	6010B	Total/NA
Potassium	1900		29	10	mg/Kg	1	☼	☼	6010B	Total/NA
Selenium	0.60		0.57	0.34	mg/Kg	1	☼	☼	6010B	Total/NA
Silver	1.4		0.29	0.074	mg/Kg	1	☼	☼	6010B	Total/NA
Sodium	320		57	8.5	mg/Kg	1	☼	☼	6010B	Total/NA
Thallium	0.63		0.57	0.29	mg/Kg	1	☼	☼	6010B	Total/NA
Vanadium	14		0.29	0.068	mg/Kg	1	☼	☼	6010B	Total/NA
Zinc	49		1.1	0.50	mg/Kg	1	☼	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6) (Continued)

Lab Sample ID: 500-173762-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.25	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B ^	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.052		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.010	J	0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.023	J	0.073	0.0067	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.036		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.43	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.068	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	30		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.62		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	1400		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.74		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.32	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.083	J B ^	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.039		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.012	J	0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0052	J	0.0059	0.0026	mg/Kg	1	✳	8260B	Total/NA
Acetone	0.034		0.024	0.010	mg/Kg	1	✳	8260B	Total/NA
Naphthalene	0.33		0.040	0.0061	mg/Kg	1	✳	8270D	Total/NA
2-Methylnaphthalene	0.14		0.080	0.0073	mg/Kg	1	✳	8270D	Total/NA
Acenaphthylene	0.087		0.040	0.0053	mg/Kg	1	✳	8270D	Total/NA
Acenaphthene	0.17		0.040	0.0072	mg/Kg	1	✳	8270D	Total/NA
Dibenzofuran	0.21		0.20	0.047	mg/Kg	1	✳	8270D	Total/NA
Fluorene	0.27		0.040	0.0056	mg/Kg	1	✳	8270D	Total/NA
Phenanthrene	1.7		0.040	0.0056	mg/Kg	1	✳	8270D	Total/NA
Anthracene	0.40		0.040	0.0067	mg/Kg	1	✳	8270D	Total/NA
Carbazole	0.19	J	0.20	0.10	mg/Kg	1	✳	8270D	Total/NA
Fluoranthene	1.5		0.040	0.0074	mg/Kg	1	✳	8270D	Total/NA
Pyrene	2.2		0.040	0.0079	mg/Kg	1	✳	8270D	Total/NA
Benzo[a]anthracene	0.77		0.040	0.0054	mg/Kg	1	✳	8270D	Total/NA
Chrysene	0.94		0.040	0.011	mg/Kg	1	✳	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.16	J	0.20	0.073	mg/Kg	1	✳	8270D	Total/NA
Benzo[b]fluoranthene - DL	0.98		0.079	0.017	mg/Kg	2	✳	8270D	Total/NA
Benzo[k]fluoranthene - DL	0.36		0.079	0.023	mg/Kg	2	✳	8270D	Total/NA
Benzo[a]pyrene - DL	0.78		0.079	0.015	mg/Kg	2	✳	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	0.29		0.079	0.021	mg/Kg	2	✳	8270D	Total/NA
Dibenz(a,h)anthracene - DL	0.082		0.079	0.015	mg/Kg	2	✳	8270D	Total/NA
Benzo[g,h,i]perylene - DL	0.33		0.079	0.026	mg/Kg	2	✳	8270D	Total/NA
Antimony	0.64	J B	1.2	0.23	mg/Kg	1	✳	6010B	Total/NA
Arsenic	7.8		0.59	0.20	mg/Kg	1	✳	6010B	Total/NA
Barium	71		0.59	0.067	mg/Kg	1	✳	6010B	Total/NA
Beryllium	0.64		0.24	0.055	mg/Kg	1	✳	6010B	Total/NA
Boron	16		2.9	0.27	mg/Kg	1	✳	6010B	Total/NA
Cadmium	0.28	B	0.12	0.021	mg/Kg	1	✳	6010B	Total/NA
Calcium	59000	B	120	20	mg/Kg	10	✳	6010B	Total/NA
Chromium	17	B	0.59	0.29	mg/Kg	1	✳	6010B	Total/NA
Cobalt	13		0.29	0.077	mg/Kg	1	✳	6010B	Total/NA
Copper	39		0.59	0.17	mg/Kg	1	✳	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	✳	6010B	Total/NA
Lead	140		0.29	0.14	mg/Kg	1	✳	6010B	Total/NA
Magnesium	24000	B	5.9	2.9	mg/Kg	1	✳	6010B	Total/NA
Manganese	310		0.59	0.085	mg/Kg	1	✳	6010B	Total/NA
Nickel	35		0.59	0.17	mg/Kg	1	✳	6010B	Total/NA
Potassium	2700		29	10	mg/Kg	1	✳	6010B	Total/NA
Selenium	0.78		0.59	0.35	mg/Kg	1	✳	6010B	Total/NA
Silver	2.0		0.29	0.076	mg/Kg	1	✳	6010B	Total/NA
Sodium	1100		59	8.7	mg/Kg	1	✳	6010B	Total/NA
Thallium	0.93		0.59	0.29	mg/Kg	1	✳	6010B	Total/NA
Vanadium	18		0.29	0.070	mg/Kg	1	✳	6010B	Total/NA
Zinc	100		1.2	0.52	mg/Kg	1	✳	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0032	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.23	J	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.019		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4) (Continued)

Lab Sample ID: 500-173762-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J B ^	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.062		0.020	0.0065	mg/Kg	1	*	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173762-9	2615V2-01-B07 (0-6)	Solid	11/20/19 01:30	11/20/19 12:00	
500-173762-10	2615V2-01-B24 (0-4)	Solid	11/20/19 02:45	11/20/19 12:00	
500-173762-11	2615V2-01-B27 (0-4)	Solid	11/20/19 03:00	11/20/19 12:00	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00063	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,2-Dichloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
2-Hexanone	<0.0037		0.0037	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Acetone	<0.015		0.015	0.0064	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Carbon disulfide	<0.0037		0.0037	0.00076	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Methylene Chloride	<0.0037		0.0037	0.0014	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Vinyl chloride	<0.0015		0.0015	0.00065	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	11/20/19 18:00	11/30/19 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/20/19 18:00	11/30/19 15:41	1
4-Bromofluorobenzene (Surr)	109		75 - 131	11/20/19 18:00	11/30/19 15:41	1
Dibromofluoromethane	89		75 - 126	11/20/19 18:00	11/30/19 15:41	1
Toluene-d8 (Surr)	97		75 - 124	11/20/19 18:00	11/30/19 15:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.085	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Bis(2-chloroethyl)ether	<0.19	*	0.19	0.057	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2-Methylphenol	<0.19	*	0.19	0.061	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.044	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
N-Nitrosodi-n-propylamine	<0.077	*	0.077	0.047	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Hexachloroethane	<0.19	*	0.19	0.058	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2-Chlorophenol	<0.19	*	0.19	0.065	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Nitrobenzene	<0.038	*	0.038	0.0096	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Bis(2-chloroethoxy)methane	<0.19	*	0.19	0.039	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Isophorone	<0.19	*	0.19	0.043	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Naphthalene	0.032	J	0.038	0.0059	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2-Methylnaphthalene	0.040	J	0.077	0.0070	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2-Nitroaniline	<0.19	*	0.19	0.052	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,4-Dinitrophenol	<0.77	*	0.77	0.67	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Acenaphthylene	0.025	J	0.038	0.0050	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Acenaphthene	0.045		0.038	0.0069	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Fluorene	0.037	J	0.038	0.0054	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
N-Nitrosodiphenylamine	<0.19	*	0.19	0.045	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Phenanthrene	0.50		0.038	0.0053	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Anthracene	0.11		0.038	0.0064	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Fluoranthene	0.84		0.038	0.0071	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Pyrene	0.81		0.038	0.0076	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Butyl benzyl phthalate	<0.19	*	0.19	0.073	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Benzo[a]anthracene	0.42		0.038	0.0052	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.42		0.038	0.010	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Bis(2-ethylhexyl) phthalate	0.071	J	0.19	0.070	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Benzo[b]fluoranthene	0.56		0.038	0.0083	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Benzo[k]fluoranthene	0.22		0.038	0.011	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Benzo[a]pyrene	0.39		0.038	0.0074	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Indeno[1,2,3-cd]pyrene	0.14		0.038	0.0099	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Dibenz(a,h)anthracene	0.034	J	0.038	0.0074	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Benzo[g,h,i]perylene	0.16		0.038	0.012	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/02/19 19:13	12/05/19 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	123		31 - 166				12/02/19 19:13	12/05/19 15:51	1
Phenol-d5	118		30 - 153				12/02/19 19:13	12/05/19 15:51	1
Nitrobenzene-d5	92		37 - 147				12/02/19 19:13	12/05/19 15:51	1
2-Fluorobiphenyl	81		43 - 145				12/02/19 19:13	12/05/19 15:51	1
2,4,6-Tribromophenol	39		31 - 143				12/02/19 19:13	12/05/19 15:51	1
Terphenyl-d14	89		42 - 157				12/02/19 19:13	12/05/19 15:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.73	J B	1.1	0.22	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Arsenic	5.4		0.57	0.20	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Barium	48		0.57	0.065	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Beryllium	0.49		0.23	0.053	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Boron	13		2.9	0.27	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Cadmium	0.14	B	0.11	0.021	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Calcium	110000	B	110	19	mg/Kg	☼	12/03/19 17:42	12/05/19 11:33	10
Chromium	12	B	0.57	0.28	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Cobalt	8.3		0.29	0.075	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Copper	20		0.57	0.16	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Iron	12000		11	6.0	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Lead	24		0.29	0.13	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Magnesium	61000	B	57	28	mg/Kg	☼	12/03/19 17:42	12/05/19 11:33	10
Manganese	290		0.57	0.083	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Nickel	22		0.57	0.17	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Potassium	1900		29	10	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Selenium	0.60		0.57	0.34	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Silver	1.4		0.29	0.074	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Sodium	320		57	8.5	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Thallium	0.63		0.57	0.29	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Vanadium	14		0.29	0.068	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1
Zinc	49		1.1	0.50	mg/Kg	☼	12/03/19 17:42	12/04/19 16:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 22:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 22:33	1
Boron	0.12	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 22:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 84.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0022	J	0.0050	0.0020	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Chromium	<0.025		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Cobalt	0.013	J	0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Iron	0.25	J	0.40	0.20	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Manganese	1.7		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Nickel	0.023	J	0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Selenium	<0.050		0.050	0.020	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Silver	<0.025		0.025	0.010	mg/L	-	11/24/19 16:20	11/27/19 22:33	1
Zinc	0.13	J B ^	0.50	0.020	mg/L	-	11/24/19 16:20	11/27/19 22:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.22		0.025	0.010	mg/L	-	11/26/19 15:31	11/27/19 14:25	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	11/24/19 16:20	11/28/19 00:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	11/24/19 16:20	11/28/19 00:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	11/25/19 10:00	11/26/19 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.052		0.019	0.0063	mg/Kg	☼	12/02/19 15:05	12/03/19 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU	-		11/25/19 10:51	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Date Collected: 11/20/19 02:45

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Acetone	0.010	J	0.017	0.0072	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/20/19 18:00	11/30/19 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/20/19 18:00	11/30/19 16:07	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/20/19 18:00	11/30/19 16:07	1
Dibromofluoromethane	91		75 - 126	11/20/19 18:00	11/30/19 16:07	1
Toluene-d8 (Surr)	95		75 - 124	11/20/19 18:00	11/30/19 16:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18	*	0.18	0.081	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Bis(2-chloroethyl)ether	<0.18	*	0.18	0.054	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Date Collected: 11/20/19 02:45

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2-Methylphenol	<0.18	*	0.18	0.058	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,2'-oxybis[1-chloropropane]	<0.18	*	0.18	0.042	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
N-Nitrosodi-n-propylamine	<0.073	*	0.073	0.044	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Hexachloroethane	<0.18	*	0.18	0.055	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2-Chlorophenol	<0.18	*	0.18	0.062	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Nitrobenzene	<0.036	*	0.036	0.0091	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Bis(2-chloroethoxy)methane	<0.18	*	0.18	0.037	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Isophorone	<0.18	*	0.18	0.041	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2-Methylnaphthalene	0.023	J	0.073	0.0067	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2-Nitroaniline	<0.18	*	0.18	0.049	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,4-Dinitrophenol	<0.73	*	0.73	0.64	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
N-Nitrosodiphenylamine	<0.18	*	0.18	0.043	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Phenanthrene	0.12		0.036	0.0051	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Butyl benzyl phthalate	<0.18	*	0.18	0.069	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Benzof[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Date Collected: 11/20/19 02:45

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036		0.036	0.0099	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/02/19 19:13	12/04/19 17:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				12/02/19 19:13	12/04/19 17:40	1
Phenol-d5	64		30 - 153				12/02/19 19:13	12/04/19 17:40	1
Nitrobenzene-d5	75		37 - 147				12/02/19 19:13	12/04/19 17:40	1
2-Fluorobiphenyl	84		43 - 145				12/02/19 19:13	12/04/19 17:40	1
2,4,6-Tribromophenol	42		31 - 143				12/02/19 19:13	12/04/19 17:40	1
Terphenyl-d14	104		42 - 157				12/02/19 19:13	12/04/19 17:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J B	1.1	0.22	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Arsenic	4.5		0.56	0.19	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Barium	35		0.56	0.064	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Beryllium	0.61		0.22	0.052	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Boron	15		2.8	0.26	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Cadmium	0.068	J B	0.11	0.020	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Calcium	54000	B	110	19	mg/Kg	☼	12/03/19 17:42	12/05/19 11:37	10
Chromium	15	B	0.56	0.28	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Cobalt	11		0.28	0.073	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Copper	22		0.56	0.16	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Iron	14000		11	5.8	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Lead	12		0.28	0.13	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Magnesium	22000	B	5.6	2.8	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Manganese	210		0.56	0.081	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Nickel	30		0.56	0.16	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Potassium	2800		28	9.9	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Selenium	0.62		0.56	0.33	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Silver	1.9		0.28	0.072	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Sodium	1400		56	8.3	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Thallium	0.74		0.56	0.28	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Vanadium	18		0.28	0.066	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1
Zinc	36		1.1	0.49	mg/Kg	☼	12/03/19 17:42	12/04/19 16:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 22:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 22:38	1
Boron	0.070	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 22:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Date Collected: 11/20/19 02:45

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 87.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 22:38	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:38	1
Cobalt	0.019	J	0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:38	1
Iron	0.32	J	0.40	0.20	mg/L		11/24/19 16:20	11/27/19 22:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 22:38	1
Manganese	1.6		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:38	1
Nickel	0.033		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:38	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 22:38	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:38	1
Zinc	0.083	J B ^	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 22:38	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.039		0.025	0.010	mg/L		11/26/19 15:31	11/27/19 14:29	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 00:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 00:56	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.017	0.0057	mg/Kg	☼	12/02/19 15:05	12/03/19 08:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			11/25/19 10:51	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00080	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00076	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,1-Dichloroethane	<0.0024		0.0024	0.00081	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,1-Dichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,2-Dichloroethane	<0.0059		0.0059	0.0019	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,2-Dichloropropane	<0.0024		0.0024	0.00061	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00083	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
2-Butanone (MEK)	0.0052	J	0.0059	0.0026	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
2-Hexanone	<0.0059		0.0059	0.0019	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
4-Methyl-2-pentanone (MIBK)	<0.0059		0.0059	0.0018	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Acetone	0.034		0.024	0.010	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Benzene	<0.0024		0.0024	0.00061	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Bromodichloromethane	<0.0024		0.0024	0.00048	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Bromoform	<0.0024		0.0024	0.00069	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Bromomethane	<0.0059		0.0059	0.0022	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Carbon disulfide	<0.0059		0.0059	0.0012	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Carbon tetrachloride	<0.0024		0.0024	0.00069	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Chlorobenzene	<0.0024		0.0024	0.00088	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Chloroethane	<0.0059		0.0059	0.0018	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Chloroform	<0.0024		0.0024	0.00082	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Chloromethane	<0.0059		0.0059	0.0024	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00066	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00072	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Dibromochloromethane	<0.0024		0.0024	0.00078	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00070	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Methylene Chloride	<0.0059		0.0059	0.0023	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Styrene	<0.0024		0.0024	0.00072	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Tetrachloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Toluene	<0.0024		0.0024	0.00060	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00083	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Trichloroethene	<0.0024		0.0024	0.00080	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Vinyl acetate	<0.0059		0.0059	0.0021	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1
Xylenes, Total	<0.0048		0.0048	0.00076	mg/Kg	☼	11/20/19 18:00	11/30/19 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/20/19 18:00	11/30/19 16:33	1
4-Bromofluorobenzene (Surr)	100		75 - 131	11/20/19 18:00	11/30/19 16:33	1
Dibromofluoromethane	90		75 - 126	11/20/19 18:00	11/30/19 16:33	1
Toluene-d8 (Surr)	93		75 - 124	11/20/19 18:00	11/30/19 16:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Bis(2-chloroethyl)ether	<0.20	*	0.20	0.060	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2-Methylphenol	<0.20	*	0.20	0.064	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
N-Nitrosodi-n-propylamine	<0.080	*	0.080	0.049	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Hexachloroethane	<0.20	*	0.20	0.061	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2-Chlorophenol	<0.20	*	0.20	0.068	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Nitrobenzene	<0.040	*	0.040	0.0099	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Bis(2-chloroethoxy)methane	<0.20	*	0.20	0.041	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Naphthalene	0.33		0.040	0.0061	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2-Methylnaphthalene	0.14		0.080	0.0073	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2-Nitroaniline	<0.20	*	0.20	0.054	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Acenaphthylene	0.087		0.040	0.0053	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Acenaphthene	0.17		0.040	0.0072	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Dibenzofuran	0.21		0.20	0.047	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Fluorene	0.27		0.040	0.0056	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.047	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Phenanthrene	1.7		0.040	0.0056	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Anthracene	0.40		0.040	0.0067	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Carbazole	0.19	J	0.20	0.10	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Fluoranthene	1.5		0.040	0.0074	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Pyrene	2.2		0.040	0.0079	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Butyl benzyl phthalate	<0.20	*	0.20	0.076	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Benzo[a]anthracene	0.77		0.040	0.0054	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.94		0.040	0.011	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Bis(2-ethylhexyl) phthalate	0.16	J	0.20	0.073	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/02/19 19:13	12/04/19 18:07	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166				12/02/19 19:13	12/04/19 18:07	1
Phenol-d5	60		30 - 153				12/02/19 19:13	12/04/19 18:07	1
Nitrobenzene-d5	69		37 - 147				12/02/19 19:13	12/04/19 18:07	1
2-Fluorobiphenyl	83		43 - 145				12/02/19 19:13	12/04/19 18:07	1
2,4,6-Tribromophenol	41		31 - 143				12/02/19 19:13	12/04/19 18:07	1
Terphenyl-d14	110		42 - 157				12/02/19 19:13	12/04/19 18:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	0.98		0.079	0.017	mg/Kg	☼	12/02/19 19:13	12/05/19 14:29	2
Benzo[k]fluoranthene	0.36		0.079	0.023	mg/Kg	☼	12/02/19 19:13	12/05/19 14:29	2
Benzo[a]pyrene	0.78		0.079	0.015	mg/Kg	☼	12/02/19 19:13	12/05/19 14:29	2
Indeno[1,2,3-cd]pyrene	0.29		0.079	0.021	mg/Kg	☼	12/02/19 19:13	12/05/19 14:29	2
Dibenz(a,h)anthracene	0.082		0.079	0.015	mg/Kg	☼	12/02/19 19:13	12/05/19 14:29	2
Benzo[g,h,i]perylene	0.33		0.079	0.026	mg/Kg	☼	12/02/19 19:13	12/05/19 14:29	2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J B	1.2	0.23	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Arsenic	7.8		0.59	0.20	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Barium	71		0.59	0.067	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Beryllium	0.64		0.24	0.055	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Boron	16		2.9	0.27	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Cadmium	0.28	B	0.12	0.021	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Calcium	59000	B	120	20	mg/Kg	☼	12/03/19 17:42	12/05/19 11:42	10
Chromium	17	B	0.59	0.29	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Cobalt	13		0.29	0.077	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Copper	39		0.59	0.17	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Iron	19000		12	6.1	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Lead	140		0.29	0.14	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Magnesium	24000	B	5.9	2.9	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Manganese	310		0.59	0.085	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Nickel	35		0.59	0.17	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Potassium	2700		29	10	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Selenium	0.78		0.59	0.35	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Silver	2.0		0.29	0.076	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Sodium	1100		59	8.7	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Thallium	0.93		0.59	0.29	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Vanadium	18		0.29	0.070	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1
Zinc	100		1.2	0.52	mg/Kg	☼	12/03/19 17:42	12/04/19 16:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.39	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 22:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 22:42	1
Boron	0.12	J	0.50	0.050	mg/L		11/24/19 16:20	11/27/19 22:42	1
Cadmium	0.0032	J	0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 22:42	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:42	1
Cobalt	0.022	J	0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:42	1
Iron	0.23	J	0.40	0.20	mg/L		11/24/19 16:20	11/27/19 22:42	1
Lead	0.019		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 22:42	1
Manganese	2.1		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:42	1
Nickel	0.034		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:42	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 22:42	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 22:42	1
Zinc	0.14	J B ^	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 22:42	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/26/19 15:31	11/27/19 14:34	1
Manganese	<0.025		0.025	0.010	mg/L		11/26/19 15:31	11/27/19 14:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 01:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 01:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062		0.020	0.0065	mg/Kg	☼	12/02/19 15:05	12/03/19 08:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU			11/25/19 10:51	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

GC/MS VOA

Analysis Batch: 517969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	8260B	517990
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	8260B	517990
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	8260B	517990
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	8260B	517990
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	8260B	517990
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	8260B	517990
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	8260B	517990
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	8260B	517990
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	8260B	517990
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	8260B	517990
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	8260B	517990
MB 500-517969/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-517969/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-517969/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 517990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	5035	
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	5035	
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	5035	
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	5035	
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	5035	
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	5035	
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	5035	
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	5035	
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	5035	
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	5035	
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 518266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	3541	
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	3541	
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	3541	
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	3541	
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	3541	
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	3541	
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	3541	
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	3541	
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	3541	
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	3541	
500-173762-11 - DL	2615V2-01-B27 (0-4)	Total/NA	Solid	3541	
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	3541	
MB 500-518266/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-518266/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-173762-1 MS	2615V2-01-B05 (0-6)	Total/NA	Solid	3541	
500-173762-1 MSD	2615V2-01-B05 (0-6)	Total/NA	Solid	3541	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

GC/MS Semi VOA

Analysis Batch: 518390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-518266/1-A	Method Blank	Total/NA	Solid	8270D	518266
LCS 500-518266/2-A	Lab Control Sample	Total/NA	Solid	8270D	518266

Analysis Batch: 518566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	8270D	518266
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	8270D	518266
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	8270D	518266
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	8270D	518266
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	8270D	518266
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	8270D	518266
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	8270D	518266
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	8270D	518266
500-173762-1 MS	2615V2-01-B05 (0-6)	Total/NA	Solid	8270D	518266
500-173762-1 MSD	2615V2-01-B05 (0-6)	Total/NA	Solid	8270D	518266

Analysis Batch: 518840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	8270D	518266
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	8270D	518266
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	8270D	518266
500-173762-11 - DL	2615V2-01-B27 (0-4)	Total/NA	Solid	8270D	518266

Metals

Leach Batch: 516884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	TCLP	Solid	1311	
500-173762-2	2615V2-01-B05 (6-12)	TCLP	Solid	1311	
500-173762-3	2615V2-01-B05 (12-18)	TCLP	Solid	1311	
500-173762-5	2615V2-01-B06 (6-12)	TCLP	Solid	1311	
500-173762-6	2615V2-01-B06 (12-19)	TCLP	Solid	1311	
500-173762-7	2615V2-01-B04 (0-5)	TCLP	Solid	1311	
500-173762-8	2615V2-01-B04 (5-9)	TCLP	Solid	1311	
500-173762-9	2615V2-01-B07 (0-6)	TCLP	Solid	1311	
500-173762-10	2615V2-01-B24 (0-4)	TCLP	Solid	1311	
500-173762-11	2615V2-01-B27 (0-4)	TCLP	Solid	1311	
LB 500-516884/1-B	Method Blank	TCLP	Solid	1311	
LB 500-516884/1-C	Method Blank	TCLP	Solid	1311	
500-173762-3 MS	2615V2-01-B05 (12-18)	TCLP	Solid	1311	
500-173762-11 MS	2615V2-01-B27 (0-4)	TCLP	Solid	1311	
500-173762-3 DU	2615V2-01-B05 (12-18)	TCLP	Solid	1311	
500-173762-11 DU	2615V2-01-B27 (0-4)	TCLP	Solid	1311	

Leach Batch: 516885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-4	2615V2-01-B06 (0-6)	TCLP	Solid	1311	
LB2 500-516885/1-B	Method Blank	TCLP	Solid	1311	
LB2 500-516885/1-C	Method Blank	TCLP	Solid	1311	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Metals

Prep Batch: 517069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	TCLP	Solid	3010A	516884
500-173762-2	2615V2-01-B05 (6-12)	TCLP	Solid	3010A	516884
500-173762-3	2615V2-01-B05 (12-18)	TCLP	Solid	3010A	516884
500-173762-4	2615V2-01-B06 (0-6)	TCLP	Solid	3010A	516885
500-173762-5	2615V2-01-B06 (6-12)	TCLP	Solid	3010A	516884
500-173762-6	2615V2-01-B06 (12-19)	TCLP	Solid	3010A	516884
500-173762-7	2615V2-01-B04 (0-5)	TCLP	Solid	3010A	516884
500-173762-8	2615V2-01-B04 (5-9)	TCLP	Solid	3010A	516884
500-173762-9	2615V2-01-B07 (0-6)	TCLP	Solid	3010A	516884
500-173762-10	2615V2-01-B24 (0-4)	TCLP	Solid	3010A	516884
500-173762-11	2615V2-01-B27 (0-4)	TCLP	Solid	3010A	516884
LB 500-516884/1-B	Method Blank	TCLP	Solid	3010A	516884
LB2 500-516885/1-B	Method Blank	TCLP	Solid	3010A	516885
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173762-11 MS	2615V2-01-B27 (0-4)	TCLP	Solid	3010A	516884
500-173762-11 DU	2615V2-01-B27 (0-4)	TCLP	Solid	3010A	516884

Prep Batch: 517185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-4	2615V2-01-B06 (0-6)	TCLP	Solid	7470A	516885
LB2 500-516885/1-C	Method Blank	TCLP	Solid	7470A	516885
MB 500-517185/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-517185/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 517187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	TCLP	Solid	7470A	516884
500-173762-2	2615V2-01-B05 (6-12)	TCLP	Solid	7470A	516884
500-173762-3	2615V2-01-B05 (12-18)	TCLP	Solid	7470A	516884
500-173762-5	2615V2-01-B06 (6-12)	TCLP	Solid	7470A	516884
500-173762-6	2615V2-01-B06 (12-19)	TCLP	Solid	7470A	516884
500-173762-7	2615V2-01-B04 (0-5)	TCLP	Solid	7470A	516884
500-173762-8	2615V2-01-B04 (5-9)	TCLP	Solid	7470A	516884
500-173762-9	2615V2-01-B07 (0-6)	TCLP	Solid	7470A	516884
500-173762-10	2615V2-01-B24 (0-4)	TCLP	Solid	7470A	516884
500-173762-11	2615V2-01-B27 (0-4)	TCLP	Solid	7470A	516884
LB 500-516884/1-C	Method Blank	TCLP	Solid	7470A	516884
MB 500-517187/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-517187/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-173762-3 MS	2615V2-01-B05 (12-18)	TCLP	Solid	7470A	516884
500-173762-3 DU	2615V2-01-B05 (12-18)	TCLP	Solid	7470A	516884

Leach Batch: 517216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	SPLP East	Solid	1312	
500-173762-2	2615V2-01-B05 (6-12)	SPLP East	Solid	1312	
500-173762-3	2615V2-01-B05 (12-18)	SPLP East	Solid	1312	
500-173762-4	2615V2-01-B06 (0-6)	SPLP East	Solid	1312	
500-173762-5	2615V2-01-B06 (6-12)	SPLP East	Solid	1312	
500-173762-6	2615V2-01-B06 (12-19)	SPLP East	Solid	1312	
500-173762-7	2615V2-01-B04 (0-5)	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Metals (Continued)

Leach Batch: 517216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-8	2615V2-01-B04 (5-9)	SPLP East	Solid	1312	
500-173762-9	2615V2-01-B07 (0-6)	SPLP East	Solid	1312	
500-173762-10	2615V2-01-B24 (0-4)	SPLP East	Solid	1312	
500-173762-11	2615V2-01-B27 (0-4)	SPLP East	Solid	1312	
LB 500-517216/1-B	Method Blank	SPLP East	Solid	1312	
500-173762-11 MS	2615V2-01-B27 (0-4)	SPLP East	Solid	1312	
500-173762-11 DU	2615V2-01-B27 (0-4)	SPLP East	Solid	1312	

Analysis Batch: 517394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	TCLP	Solid	7470A	517187
500-173762-2	2615V2-01-B05 (6-12)	TCLP	Solid	7470A	517187
500-173762-3	2615V2-01-B05 (12-18)	TCLP	Solid	7470A	517187
500-173762-4	2615V2-01-B06 (0-6)	TCLP	Solid	7470A	517185
500-173762-5	2615V2-01-B06 (6-12)	TCLP	Solid	7470A	517187
500-173762-6	2615V2-01-B06 (12-19)	TCLP	Solid	7470A	517187
500-173762-7	2615V2-01-B04 (0-5)	TCLP	Solid	7470A	517187
500-173762-8	2615V2-01-B04 (5-9)	TCLP	Solid	7470A	517187
500-173762-9	2615V2-01-B07 (0-6)	TCLP	Solid	7470A	517187
500-173762-10	2615V2-01-B24 (0-4)	TCLP	Solid	7470A	517187
500-173762-11	2615V2-01-B27 (0-4)	TCLP	Solid	7470A	517187
LB 500-516884/1-C	Method Blank	TCLP	Solid	7470A	517187
LB2 500-516885/1-C	Method Blank	TCLP	Solid	7470A	517185
MB 500-517185/12-A	Method Blank	Total/NA	Solid	7470A	517185
MB 500-517187/12-A	Method Blank	Total/NA	Solid	7470A	517187
LCS 500-517185/13-A	Lab Control Sample	Total/NA	Solid	7470A	517185
LCS 500-517187/13-A	Lab Control Sample	Total/NA	Solid	7470A	517187
500-173762-3 MS	2615V2-01-B05 (12-18)	TCLP	Solid	7470A	517187
500-173762-3 DU	2615V2-01-B05 (12-18)	TCLP	Solid	7470A	517187

Prep Batch: 517445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	SPLP East	Solid	3010A	517216
500-173762-2	2615V2-01-B05 (6-12)	SPLP East	Solid	3010A	517216
500-173762-3	2615V2-01-B05 (12-18)	SPLP East	Solid	3010A	517216
500-173762-4	2615V2-01-B06 (0-6)	SPLP East	Solid	3010A	517216
500-173762-5	2615V2-01-B06 (6-12)	SPLP East	Solid	3010A	517216
500-173762-6	2615V2-01-B06 (12-19)	SPLP East	Solid	3010A	517216
500-173762-7	2615V2-01-B04 (0-5)	SPLP East	Solid	3010A	517216
500-173762-8	2615V2-01-B04 (5-9)	SPLP East	Solid	3010A	517216
500-173762-9	2615V2-01-B07 (0-6)	SPLP East	Solid	3010A	517216
500-173762-10	2615V2-01-B24 (0-4)	SPLP East	Solid	3010A	517216
500-173762-11	2615V2-01-B27 (0-4)	SPLP East	Solid	3010A	517216
LB 500-517216/1-B	Method Blank	SPLP East	Solid	3010A	517216
LCS 500-517445/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173762-11 MS	2615V2-01-B27 (0-4)	SPLP East	Solid	3010A	517216
500-173762-11 DU	2615V2-01-B27 (0-4)	SPLP East	Solid	3010A	517216

Analysis Batch: 517762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	TCLP	Solid	6010B	517069

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Metals (Continued)

Analysis Batch: 517762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-2	2615V2-01-B05 (6-12)	TCLP	Solid	6010B	517069
500-173762-3	2615V2-01-B05 (12-18)	TCLP	Solid	6010B	517069
500-173762-4	2615V2-01-B06 (0-6)	TCLP	Solid	6010B	517069
500-173762-5	2615V2-01-B06 (6-12)	TCLP	Solid	6010B	517069
500-173762-6	2615V2-01-B06 (12-19)	TCLP	Solid	6010B	517069
500-173762-7	2615V2-01-B04 (0-5)	TCLP	Solid	6010B	517069
500-173762-8	2615V2-01-B04 (5-9)	TCLP	Solid	6010B	517069
500-173762-9	2615V2-01-B07 (0-6)	TCLP	Solid	6010B	517069
500-173762-10	2615V2-01-B24 (0-4)	TCLP	Solid	6010B	517069
500-173762-11	2615V2-01-B27 (0-4)	TCLP	Solid	6010B	517069
LB 500-516884/1-B	Method Blank	TCLP	Solid	6010B	517069
LB2 500-516885/1-B	Method Blank	TCLP	Solid	6010B	517069
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	6010B	517069
500-173762-11 MS	2615V2-01-B27 (0-4)	TCLP	Solid	6010B	517069
500-173762-11 DU	2615V2-01-B27 (0-4)	TCLP	Solid	6010B	517069

Analysis Batch: 517765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	SPLP East	Solid	6010B	517445
500-173762-2	2615V2-01-B05 (6-12)	SPLP East	Solid	6010B	517445
500-173762-3	2615V2-01-B05 (12-18)	SPLP East	Solid	6010B	517445
500-173762-4	2615V2-01-B06 (0-6)	SPLP East	Solid	6010B	517445
500-173762-5	2615V2-01-B06 (6-12)	SPLP East	Solid	6010B	517445
500-173762-6	2615V2-01-B06 (12-19)	SPLP East	Solid	6010B	517445
500-173762-7	2615V2-01-B04 (0-5)	SPLP East	Solid	6010B	517445
500-173762-8	2615V2-01-B04 (5-9)	SPLP East	Solid	6010B	517445
500-173762-9	2615V2-01-B07 (0-6)	SPLP East	Solid	6010B	517445
500-173762-10	2615V2-01-B24 (0-4)	SPLP East	Solid	6010B	517445
500-173762-11	2615V2-01-B27 (0-4)	SPLP East	Solid	6010B	517445
LB 500-517216/1-B	Method Blank	SPLP East	Solid	6010B	517445
LCS 500-517445/2-A	Lab Control Sample	Total/NA	Solid	6010B	517445
500-173762-11 MS	2615V2-01-B27 (0-4)	SPLP East	Solid	6010B	517445
500-173762-11 DU	2615V2-01-B27 (0-4)	SPLP East	Solid	6010B	517445

Analysis Batch: 517827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	TCLP	Solid	6020A	517069
500-173762-2	2615V2-01-B05 (6-12)	TCLP	Solid	6020A	517069
500-173762-3	2615V2-01-B05 (12-18)	TCLP	Solid	6020A	517069
500-173762-4	2615V2-01-B06 (0-6)	TCLP	Solid	6020A	517069
500-173762-5	2615V2-01-B06 (6-12)	TCLP	Solid	6020A	517069
500-173762-6	2615V2-01-B06 (12-19)	TCLP	Solid	6020A	517069
500-173762-7	2615V2-01-B04 (0-5)	TCLP	Solid	6020A	517069
500-173762-8	2615V2-01-B04 (5-9)	TCLP	Solid	6020A	517069
500-173762-9	2615V2-01-B07 (0-6)	TCLP	Solid	6020A	517069
500-173762-10	2615V2-01-B24 (0-4)	TCLP	Solid	6020A	517069
500-173762-11	2615V2-01-B27 (0-4)	TCLP	Solid	6020A	517069
LB 500-516884/1-B	Method Blank	TCLP	Solid	6020A	517069
LB2 500-516885/1-B	Method Blank	TCLP	Solid	6020A	517069
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	6020A	517069
500-173762-11 MS	2615V2-01-B27 (0-4)	TCLP	Solid	6020A	517069

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Metals (Continued)

Analysis Batch: 517827 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-11 DU	2615V2-01-B27 (0-4)	TCLP	Solid	6020A	517069

Analysis Batch: 517892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-517069/2-A	Lab Control Sample	Total/NA	Solid	6010B	517069

Prep Batch: 518179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	7471B	
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	7471B	
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	7471B	
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	7471B	
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	7471B	
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	7471B	
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	7471B	
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	7471B	
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	7471B	
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	7471B	
MB 500-518179/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-518179/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-173762-10 MS	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	
500-173762-10 MSD	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	
500-173762-10 DU	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	

Analysis Batch: 518416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	7471B	518179
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	7471B	518179
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	7471B	518179
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	7471B	518179
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	7471B	518179
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	7471B	518179
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	7471B	518179
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	7471B	518179
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	7471B	518179
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	518179
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	7471B	518179
MB 500-518179/12-A	Method Blank	Total/NA	Solid	7471B	518179
LCS 500-518179/13-A	Lab Control Sample	Total/NA	Solid	7471B	518179
500-173762-10 MS	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	518179
500-173762-10 MSD	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	518179
500-173762-10 DU	2615V2-01-B24 (0-4)	Total/NA	Solid	7471B	518179

Prep Batch: 518507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	3050B	
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	3050B	
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	3050B	
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	3050B	
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Metals (Continued)

Prep Batch: 518507 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	3050B	
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	3050B	
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	3050B	
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	3050B	
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	3050B	
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	3050B	
MB 500-518507/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518507/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-173762-1 MS	2615V2-01-B05 (0-6)	Total/NA	Solid	3050B	
500-173762-1 MSD	2615V2-01-B05 (0-6)	Total/NA	Solid	3050B	
500-173762-1 DU	2615V2-01-B05 (0-6)	Total/NA	Solid	3050B	

Analysis Batch: 518808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	6010B	518507
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	6010B	518507
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	6010B	518507
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	6010B	518507
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	6010B	518507
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	6010B	518507
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	6010B	518507
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	6010B	518507
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	6010B	518507
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	6010B	518507
MB 500-518507/1-A	Method Blank	Total/NA	Solid	6010B	518507
LCS 500-518507/2-A	Lab Control Sample	Total/NA	Solid	6010B	518507
500-173762-1 MS	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507
500-173762-1 MSD	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507
500-173762-1 DU	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507

Analysis Batch: 518953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	6010B	518507
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	6010B	518507
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	6010B	518507
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	6010B	518507
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	6010B	518507
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	6010B	518507
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	6010B	518507
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	6010B	518507
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	6010B	518507
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	6010B	518507
500-173762-1 MS	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507
500-173762-1 MSD	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507
500-173762-1 DU	2615V2-01-B05 (0-6)	Total/NA	Solid	6010B	518507

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

General Chemistry

Analysis Batch: 516842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	Moisture	
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	Moisture	
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	Moisture	
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	Moisture	
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	Moisture	
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	Moisture	
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	Moisture	
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	Moisture	
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	Moisture	
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	Moisture	
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	Moisture	
500-173762-1 DU	2615V2-01-B05 (0-6)	Total/NA	Solid	Moisture	

Analysis Batch: 517162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173762-1	2615V2-01-B05 (0-6)	Total/NA	Solid	9045D	
500-173762-2	2615V2-01-B05 (6-12)	Total/NA	Solid	9045D	
500-173762-3	2615V2-01-B05 (12-18)	Total/NA	Solid	9045D	
500-173762-4	2615V2-01-B06 (0-6)	Total/NA	Solid	9045D	
500-173762-5	2615V2-01-B06 (6-12)	Total/NA	Solid	9045D	
500-173762-6	2615V2-01-B06 (12-19)	Total/NA	Solid	9045D	
500-173762-7	2615V2-01-B04 (0-5)	Total/NA	Solid	9045D	
500-173762-8	2615V2-01-B04 (5-9)	Total/NA	Solid	9045D	
500-173762-9	2615V2-01-B07 (0-6)	Total/NA	Solid	9045D	
500-173762-10	2615V2-01-B24 (0-4)	Total/NA	Solid	9045D	
500-173762-11	2615V2-01-B27 (0-4)	Total/NA	Solid	9045D	
LCS 500-517162/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-517162/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173762-11 DU	2615V2-01-B27 (0-4)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-173762-1	2615V2-01-B05 (0-6)	93	100	88	93
500-173762-2	2615V2-01-B05 (6-12)	92	102	88	94
500-173762-3	2615V2-01-B05 (12-18)	96	110	90	97
500-173762-4	2615V2-01-B06 (0-6)	92	101	79	93
500-173762-5	2615V2-01-B06 (6-12)	93	105	74 X	95
500-173762-6	2615V2-01-B06 (12-19)	96	104	89	96
500-173762-7	2615V2-01-B04 (0-5)	93	107	89	95
500-173762-8	2615V2-01-B04 (5-9)	96	103	90	95
500-173762-9	2615V2-01-B07 (0-6)	94	109	89	97
500-173762-10	2615V2-01-B24 (0-4)	97	106	91	95
500-173762-11	2615V2-01-B27 (0-4)	97	100	90	93
LCS 500-517969/7	Lab Control Sample	90	95	87	94
LCS 500-517969/8	Lab Control Sample Dup	87	95	88	94
MB 500-517969/6	Method Blank	90	102	86	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173762-1	2615V2-01-B05 (0-6)	81	68	77	89	54	102
500-173762-1 MS	2615V2-01-B05 (0-6)	79	74	86	97	54	90
500-173762-1 MSD	2615V2-01-B05 (0-6)	83	78	88	90	57	92
500-173762-2	2615V2-01-B05 (6-12)	47	57	60	70	26 X	100
500-173762-3	2615V2-01-B05 (12-18)	58	55	67	74	38	93
500-173762-4	2615V2-01-B06 (0-6)	28 X	95	77	82	11 X	88
500-173762-5	2615V2-01-B06 (6-12)	67	62	69	78	39	98
500-173762-6	2615V2-01-B06 (12-19)	54	50	61	71	31	85
500-173762-7	2615V2-01-B04 (0-5)	78	93	75	75	18 X	87
500-173762-8	2615V2-01-B04 (5-9)	68	59	69	78	34	92
500-173762-9	2615V2-01-B07 (0-6)	123	118	92	81	39	89
500-173762-10	2615V2-01-B24 (0-4)	72	64	75	84	42	104
500-173762-11	2615V2-01-B27 (0-4)	69	60	69	83	41	110
500-173762-11 - DL	2615V2-01-B27 (0-4)	112	106	90	80	49	88
LCS 500-518266/2-A	Lab Control Sample	140	137	110	100	82	104
MB 500-518266/1-A	Method Blank	144	127	105	95	55	107

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-517969/6
Matrix: Solid
Analysis Batch: 517969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			11/30/19 09:16	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			11/30/19 09:16	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			11/30/19 09:16	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			11/30/19 09:16	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			11/30/19 09:16	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			11/30/19 09:16	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			11/30/19 09:16	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			11/30/19 09:16	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			11/30/19 09:16	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			11/30/19 09:16	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			11/30/19 09:16	1
Acetone	<0.020		0.020	0.0087	mg/Kg			11/30/19 09:16	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			11/30/19 09:16	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			11/30/19 09:16	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			11/30/19 09:16	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			11/30/19 09:16	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			11/30/19 09:16	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			11/30/19 09:16	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			11/30/19 09:16	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			11/30/19 09:16	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			11/30/19 09:16	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			11/30/19 09:16	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			11/30/19 09:16	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			11/30/19 09:16	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			11/30/19 09:16	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			11/30/19 09:16	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			11/30/19 09:16	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			11/30/19 09:16	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			11/30/19 09:16	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/30/19 09:16	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			11/30/19 09:16	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			11/30/19 09:16	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			11/30/19 09:16	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			11/30/19 09:16	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			11/30/19 09:16	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			11/30/19 09:16	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			11/30/19 09:16	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		11/30/19 09:16	1
4-Bromofluorobenzene (Surr)	102		75 - 131		11/30/19 09:16	1
Dibromofluoromethane	86		75 - 126		11/30/19 09:16	1
Toluene-d8 (Surr)	93		75 - 124		11/30/19 09:16	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-517969/7

Matrix: Solid

Analysis Batch: 517969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0456		mg/Kg		91	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0464		mg/Kg		93	70 - 122
1,1,2-Trichloroethane	0.0500	0.0482		mg/Kg		96	70 - 125
1,1-Dichloroethane	0.0500	0.0446		mg/Kg		89	70 - 125
1,1-Dichloroethene	0.0500	0.0466		mg/Kg		93	70 - 120
1,2-Dichloroethane	0.0500	0.0470		mg/Kg		94	70 - 130
1,2-Dichloropropane	0.0500	0.0458		mg/Kg		92	70 - 125
2-Butanone (MEK)	0.0500	0.0458		mg/Kg		92	47 - 138
2-Hexanone	0.0500	0.0463		mg/Kg		93	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0433		mg/Kg		87	50 - 148
Acetone	0.0500	0.0482		mg/Kg		96	40 - 150
Benzene	0.0500	0.0473		mg/Kg		95	70 - 125
Bromodichloromethane	0.0500	0.0455		mg/Kg		91	67 - 129
Bromoform	0.0500	0.0419		mg/Kg		84	68 - 136
Bromomethane	0.0500	0.0442		mg/Kg		88	70 - 130
Carbon disulfide	0.0500	0.0447		mg/Kg		89	70 - 129
Carbon tetrachloride	0.0500	0.0465		mg/Kg		93	75 - 125
Chlorobenzene	0.0500	0.0481		mg/Kg		96	50 - 150
Chloroethane	0.0500	0.0436		mg/Kg		87	75 - 125
Chloroform	0.0500	0.0441		mg/Kg		88	57 - 135
Chloromethane	0.0500	0.0414		mg/Kg		83	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0447		mg/Kg		89	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0468		mg/Kg		94	70 - 125
Dibromochloromethane	0.0500	0.0440		mg/Kg		88	69 - 125
Ethylbenzene	0.0500	0.0466		mg/Kg		93	61 - 136
Methyl tert-butyl ether	0.0500	0.0472		mg/Kg		94	50 - 140
Methylene Chloride	0.0500	0.0447		mg/Kg		89	70 - 126
Styrene	0.0500	0.0459		mg/Kg		92	70 - 125
Tetrachloroethene	0.0500	0.0480		mg/Kg		96	70 - 124
Toluene	0.0500	0.0474		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0454		mg/Kg		91	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0472		mg/Kg		94	70 - 125
Trichloroethene	0.0500	0.0482		mg/Kg		96	70 - 125
Vinyl acetate	0.0500	0.0350		mg/Kg		70	40 - 153
Vinyl chloride	0.0500	0.0435		mg/Kg		87	70 - 125
Xylenes, Total	0.100	0.0932		mg/Kg		93	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
4-Bromofluorobenzene (Surr)	95		75 - 131
Dibromofluoromethane	87		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-517969/8

Matrix: Solid

Analysis Batch: 517969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 128	3	30
1,1,2,2-Tetrachloroethane	0.0500	0.0423		mg/Kg		85	70 - 122	9	30
1,1,2-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 125	9	30
1,1-Dichloroethane	0.0500	0.0426		mg/Kg		85	70 - 125	4	30
1,1-Dichloroethene	0.0500	0.0463		mg/Kg		93	70 - 120	1	30
1,2-Dichloroethane	0.0500	0.0441		mg/Kg		88	70 - 130	6	30
1,2-Dichloropropane	0.0500	0.0447		mg/Kg		89	70 - 125	2	30
2-Butanone (MEK)	0.0500	0.0420		mg/Kg		84	47 - 138	9	30
2-Hexanone	0.0500	0.0414		mg/Kg		83	48 - 146	11	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0390		mg/Kg		78	50 - 148	10	30
Acetone	0.0500	0.0487		mg/Kg		97	40 - 150	1	30
Benzene	0.0500	0.0445		mg/Kg		89	70 - 125	6	30
Bromodichloromethane	0.0500	0.0432		mg/Kg		86	67 - 129	5	30
Bromoform	0.0500	0.0380		mg/Kg		76	68 - 136	10	30
Bromomethane	0.0500	0.0471		mg/Kg		94	70 - 130	6	30
Carbon disulfide	0.0500	0.0442		mg/Kg		88	70 - 129	1	30
Carbon tetrachloride	0.0500	0.0445		mg/Kg		89	75 - 125	4	30
Chlorobenzene	0.0500	0.0463		mg/Kg		93	50 - 150	4	30
Chloroethane	0.0500	0.0466		mg/Kg		93	75 - 125	7	30
Chloroform	0.0500	0.0424		mg/Kg		85	57 - 135	4	30
Chloromethane	0.0500	0.0444		mg/Kg		89	70 - 125	7	30
cis-1,2-Dichloroethene	0.0500	0.0430		mg/Kg		86	70 - 125	4	30
cis-1,3-Dichloropropene	0.0500	0.0440		mg/Kg		88	70 - 125	6	30
Dibromochloromethane	0.0500	0.0406		mg/Kg		81	69 - 125	8	30
Ethylbenzene	0.0500	0.0449		mg/Kg		90	61 - 136	4	30
Methyl tert-butyl ether	0.0500	0.0432		mg/Kg		86	50 - 140	9	30
Methylene Chloride	0.0500	0.0427		mg/Kg		85	70 - 126	5	30
Styrene	0.0500	0.0443		mg/Kg		89	70 - 125	4	30
Tetrachloroethene	0.0500	0.0460		mg/Kg		92	70 - 124	4	30
Toluene	0.0500	0.0454		mg/Kg		91	70 - 125	4	30
trans-1,2-Dichloroethene	0.0500	0.0438		mg/Kg		88	70 - 125	4	30
trans-1,3-Dichloropropene	0.0500	0.0443		mg/Kg		89	70 - 125	6	30
Trichloroethene	0.0500	0.0458		mg/Kg		92	70 - 125	5	30
Vinyl acetate	0.0500	0.0331		mg/Kg		66	40 - 153	6	30
Vinyl chloride	0.0500	0.0471		mg/Kg		94	70 - 125	8	30
Xylenes, Total	0.100	0.0900		mg/Kg		90	53 - 147	4	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		70 - 134
4-Bromofluorobenzene (Surr)	95		75 - 131
Dibromofluoromethane	88		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518266/1-A
Matrix: Solid
Analysis Batch: 518390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518266

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/02/19 19:13	12/03/19 14:27	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518266/1-A
Matrix: Solid
Analysis Batch: 518390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/02/19 19:13	12/03/19 14:27	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/02/19 19:13	12/03/19 14:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	144		31 - 166	12/02/19 19:13	12/03/19 14:27	1
Phenol-d5	127		30 - 153	12/02/19 19:13	12/03/19 14:27	1
Nitrobenzene-d5	105		37 - 147	12/02/19 19:13	12/03/19 14:27	1
2-Fluorobiphenyl	95		43 - 145	12/02/19 19:13	12/03/19 14:27	1
2,4,6-Tribromophenol	55		31 - 143	12/02/19 19:13	12/03/19 14:27	1
Terphenyl-d14	107		42 - 157	12/02/19 19:13	12/03/19 14:27	1

Lab Sample ID: LCS 500-518266/2-A
Matrix: Solid
Analysis Batch: 518390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.93	*	mg/Kg		145	56 - 122
Bis(2-chloroethyl)ether	1.33	1.67	*	mg/Kg		125	55 - 111
1,3-Dichlorobenzene	1.33	1.36		mg/Kg		102	65 - 124
1,4-Dichlorobenzene	1.33	1.37		mg/Kg		103	61 - 110
1,2-Dichlorobenzene	1.33	1.36		mg/Kg		102	62 - 110
2-Methylphenol	1.33	1.79	*	mg/Kg		134	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	2.14	*	mg/Kg		161	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.80	*	mg/Kg		135	56 - 118
Hexachloroethane	1.33	1.56	*	mg/Kg		117	60 - 114
2-Chlorophenol	1.33	1.55	*	mg/Kg		117	64 - 110
Nitrobenzene	1.33	1.77	*	mg/Kg		133	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.75	*	mg/Kg		131	60 - 112
1,2,4-Trichlorobenzene	1.33	1.29		mg/Kg		97	66 - 117
Isophorone	1.33	1.78	*	mg/Kg		133	55 - 110
2,4-Dimethylphenol	1.33	1.46		mg/Kg		109	60 - 110
Hexachlorobutadiene	1.33	1.27		mg/Kg		95	56 - 120
Naphthalene	1.33	1.43		mg/Kg		107	63 - 110
2,4-Dichlorophenol	1.33	1.37		mg/Kg		103	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518266/2-A
Matrix: Solid
Analysis Batch: 518390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.41		mg/Kg		106	30 - 150
2,4,6-Trichlorophenol	1.33	1.25		mg/Kg		94	57 - 120
2,4,5-Trichlorophenol	1.33	1.30		mg/Kg		98	50 - 120
Hexachlorocyclopentadiene	1.33	0.373	J	mg/Kg		28	10 - 133
2-Methylnaphthalene	1.33	1.39		mg/Kg		104	69 - 112
2-Nitroaniline	1.33	1.89	*	mg/Kg		142	57 - 124
2-Chloronaphthalene	1.33	1.45		mg/Kg		108	69 - 114
4-Chloro-3-methylphenol	1.33	1.55		mg/Kg		116	65 - 122
2,6-Dinitrotoluene	1.33	1.50		mg/Kg		112	70 - 123
2-Nitrophenol	1.33	1.42		mg/Kg		106	60 - 120
3-Nitroaniline	1.33	1.36		mg/Kg		102	40 - 122
Dimethyl phthalate	1.33	1.44		mg/Kg		108	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		4	10 - 100
Acenaphthylene	1.33	1.52		mg/Kg		114	68 - 120
2,4-Dinitrotoluene	1.33	1.54		mg/Kg		116	69 - 124
Acenaphthene	1.33	1.45		mg/Kg		109	65 - 124
Dibenzofuran	1.33	1.46		mg/Kg		110	66 - 115
4-Nitrophenol	2.67	2.35		mg/Kg		88	30 - 122
Fluorene	1.33	1.47		mg/Kg		110	62 - 120
4-Nitroaniline	1.33	1.41		mg/Kg		105	60 - 160
4-Bromophenyl phenyl ether	1.33	1.36		mg/Kg		102	68 - 118
Hexachlorobenzene	1.33	1.38		mg/Kg		103	63 - 124
Diethyl phthalate	1.33	1.46		mg/Kg		110	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.36		mg/Kg		102	62 - 119
Pentachlorophenol	2.67	1.04		mg/Kg		39	13 - 112
N-Nitrosodiphenylamine	1.33	1.51	*	mg/Kg		113	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.450	J	mg/Kg		17	10 - 110
Phenanthrene	1.33	1.46		mg/Kg		110	62 - 120
Anthracene	1.33	1.49		mg/Kg		112	70 - 114
Carbazole	1.33	1.58		mg/Kg		118	65 - 142
Di-n-butyl phthalate	1.33	1.59		mg/Kg		119	65 - 120
Fluoranthene	1.33	1.38		mg/Kg		104	62 - 120
Pyrene	1.33	1.65		mg/Kg		124	61 - 128
Butyl benzyl phthalate	1.33	1.77	*	mg/Kg		133	71 - 129
Benzo[a]anthracene	1.33	1.39		mg/Kg		104	67 - 122
Chrysene	1.33	1.45		mg/Kg		109	63 - 120
3,3'-Dichlorobenzidine	1.33	1.14		mg/Kg		86	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.72		mg/Kg		129	72 - 131
Di-n-octyl phthalate	1.33	1.49		mg/Kg		112	68 - 134
Benzo[b]fluoranthene	1.33	1.51		mg/Kg		113	69 - 129
Benzo[k]fluoranthene	1.33	1.29		mg/Kg		97	68 - 127
Benzo[a]pyrene	1.33	1.49		mg/Kg		112	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.41		mg/Kg		106	68 - 130
Dibenz(a,h)anthracene	1.33	1.39		mg/Kg		104	64 - 131
Benzo[g,h,i]perylene	1.33	1.51		mg/Kg		114	72 - 131
3 & 4 Methylphenol	1.33	1.58		mg/Kg		118	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518266/2-A
Matrix: Solid
Analysis Batch: 518390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518266

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	140		31 - 166
Phenol-d5	137		30 - 153
Nitrobenzene-d5	110		37 - 147
2-Fluorobiphenyl	100		43 - 145
2,4,6-Tribromophenol	82		31 - 143
Terphenyl-d14	104		42 - 157

Lab Sample ID: 500-173762-1 MS
Matrix: Solid
Analysis Batch: 518566

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.16	*	1.33	1.00		mg/Kg	☼	75	56 - 122
Bis(2-chloroethyl)ether	<0.16	*	1.33	1.20		mg/Kg	☼	90	55 - 111
1,3-Dichlorobenzene	<0.16		1.33	1.04		mg/Kg	☼	78	60 - 110
1,4-Dichlorobenzene	<0.16		1.33	1.05		mg/Kg	☼	79	61 - 110
1,2-Dichlorobenzene	<0.16		1.33	1.08		mg/Kg	☼	82	62 - 110
2-Methylphenol	<0.16	*	1.33	1.10		mg/Kg	☼	82	60 - 120
2,2'-oxybis[1-chloropropane]	<0.16	*	1.33	0.699		mg/Kg	☼	53	40 - 124
N-Nitrosodi-n-propylamine	<0.066	*	1.33	1.11		mg/Kg	☼	83	56 - 118
Hexachloroethane	<0.16	*	1.33	1.08		mg/Kg	☼	81	60 - 114
2-Chlorophenol	<0.16	*	1.33	1.21		mg/Kg	☼	91	64 - 110
Nitrobenzene	<0.032	*	1.33	1.11		mg/Kg	☼	84	60 - 116
Bis(2-chloroethoxy)methane	<0.16	*	1.33	1.25		mg/Kg	☼	94	60 - 112
1,2,4-Trichlorobenzene	<0.16		1.33	1.05		mg/Kg	☼	79	66 - 117
Isophorone	<0.16	*	1.33	1.18		mg/Kg	☼	89	55 - 110
2,4-Dimethylphenol	<0.32		1.33	1.27		mg/Kg	☼	95	60 - 110
Hexachlorobutadiene	<0.16		1.33	0.937		mg/Kg	☼	70	56 - 120
Naphthalene	<0.032		1.33	1.19		mg/Kg	☼	89	63 - 110
2,4-Dichlorophenol	<0.32		1.33	1.13		mg/Kg	☼	85	58 - 120
4-Chloroaniline	<0.66		1.33	1.02		mg/Kg	☼	76	30 - 150
2,4,6-Trichlorophenol	<0.32		1.33	1.08		mg/Kg	☼	81	57 - 120
2,4,5-Trichlorophenol	<0.32		1.33	1.10		mg/Kg	☼	83	50 - 120
Hexachlorocyclopentadiene	<0.66	F1	1.33	<0.67	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	<0.066		1.33	1.16		mg/Kg	☼	88	69 - 112
2-Nitroaniline	<0.16	*	1.33	1.18		mg/Kg	☼	89	57 - 124
2-Chloronaphthalene	<0.16		1.33	1.26		mg/Kg	☼	95	69 - 114
4-Chloro-3-methylphenol	<0.32		1.33	1.28		mg/Kg	☼	96	65 - 122
2,6-Dinitrotoluene	<0.16		1.33	1.34		mg/Kg	☼	101	70 - 123
2-Nitrophenol	<0.32		1.33	1.21		mg/Kg	☼	91	60 - 120
3-Nitroaniline	<0.32		1.33	1.01		mg/Kg	☼	76	40 - 122
Dimethyl phthalate	<0.16		1.33	1.31		mg/Kg	☼	98	69 - 116
2,4-Dinitrophenol	<0.66	*	2.66	1.33		mg/Kg	☼	50	10 - 100
Acenaphthylene	<0.032		1.33	1.26		mg/Kg	☼	94	68 - 120
2,4-Dinitrotoluene	<0.16		1.33	1.34		mg/Kg	☼	101	69 - 124
Acenaphthene	<0.032		1.33	1.32		mg/Kg	☼	99	65 - 124
Dibenzofuran	<0.16		1.33	1.31		mg/Kg	☼	99	66 - 115
4-Nitrophenol	<0.66		2.66	2.19		mg/Kg	☼	82	30 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173762-1 MS

Matrix: Solid

Analysis Batch: 518566

Client Sample ID: 2615V2-01-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 518266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	<0.032		1.33	1.26		mg/Kg	☼	94	62 - 120
4-Nitroaniline	<0.32		1.33	1.10		mg/Kg	☼	82	60 - 160
4-Bromophenyl phenyl ether	<0.16		1.33	1.11		mg/Kg	☼	84	68 - 118
Hexachlorobenzene	<0.066		1.33	1.12		mg/Kg	☼	84	63 - 124
Diethyl phthalate	<0.16		1.33	1.27		mg/Kg	☼	95	58 - 120
4-Chlorophenyl phenyl ether	<0.16		1.33	1.16		mg/Kg	☼	87	62 - 119
Pentachlorophenol	<0.66		2.66	0.710		mg/Kg	☼	27	13 - 112
N-Nitrosodiphenylamine	<0.16	* F1	1.33	1.48		mg/Kg	☼	111	65 - 112
4,6-Dinitro-2-methylphenol	<0.66		2.66	2.16		mg/Kg	☼	81	10 - 110
Phenanthrene	0.0059	J	1.33	1.37		mg/Kg	☼	103	62 - 120
Anthracene	<0.032		1.33	1.38		mg/Kg	☼	104	70 - 114
Carbazole	<0.16		1.33	1.56		mg/Kg	☼	117	65 - 142
Di-n-butyl phthalate	<0.16		1.33	1.50		mg/Kg	☼	113	65 - 120
Fluoranthene	0.012	J	1.33	1.28		mg/Kg	☼	96	62 - 120
Pyrene	0.019	J	1.33	1.41		mg/Kg	☼	105	61 - 128
Butyl benzyl phthalate	<0.16	*	1.33	1.63		mg/Kg	☼	122	71 - 129
Benzo[a]anthracene	<0.032		1.33	1.29		mg/Kg	☼	97	67 - 122
Chrysene	<0.032		1.33	1.27		mg/Kg	☼	95	63 - 120
3,3'-Dichlorobenzidine	<0.16		1.33	0.923		mg/Kg	☼	69	35 - 128
Bis(2-ethylhexyl) phthalate	<0.16		1.33	1.67		mg/Kg	☼	126	72 - 131
Di-n-octyl phthalate	<0.16		1.33	1.49		mg/Kg	☼	112	68 - 134
Benzo[b]fluoranthene	<0.032		1.33	1.40		mg/Kg	☼	105	69 - 129
Benzo[k]fluoranthene	<0.032		1.33	1.40		mg/Kg	☼	105	68 - 127
Benzo[a]pyrene	<0.032		1.33	1.41		mg/Kg	☼	106	65 - 133
Indeno[1,2,3-cd]pyrene	<0.032		1.33	1.62		mg/Kg	☼	122	68 - 130
Dibenz(a,h)anthracene	<0.032		1.33	1.47		mg/Kg	☼	110	64 - 131
Benzo[g,h,i]perylene	<0.032		1.33	1.44		mg/Kg	☼	108	72 - 131
3 & 4 Methylphenol	<0.16		1.33	1.15		mg/Kg	☼	86	57 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	79		31 - 166
Phenol-d5	74		30 - 153
Nitrobenzene-d5	86		37 - 147
2-Fluorobiphenyl	97		43 - 145
2,4,6-Tribromophenol	54		31 - 143
Terphenyl-d14	90		42 - 157

Lab Sample ID: 500-173762-1 MSD

Matrix: Solid

Analysis Batch: 518566

Client Sample ID: 2615V2-01-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 518266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenol	<0.16	*	1.32	1.04		mg/Kg	☼	79	56 - 122	4	30
Bis(2-chloroethyl)ether	<0.16	*	1.32	1.28		mg/Kg	☼	97	55 - 111	6	30
1,3-Dichlorobenzene	<0.16		1.32	1.09		mg/Kg	☼	83	60 - 110	5	30
1,4-Dichlorobenzene	<0.16		1.32	1.13		mg/Kg	☼	85	61 - 110	8	30
1,2-Dichlorobenzene	<0.16		1.32	1.16		mg/Kg	☼	87	62 - 110	6	30
2-Methylphenol	<0.16	*	1.32	1.14		mg/Kg	☼	86	60 - 120	4	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173762-1 MSD

Matrix: Solid

Analysis Batch: 518566

Client Sample ID: 2615V2-01-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 518266

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
2,2'-oxybis[1-chloropropane]	<0.16	*	1.32	0.753		mg/Kg	☼	57	40 - 124	7	30
N-Nitrosodi-n-propylamine	<0.066	*	1.32	1.17		mg/Kg	☼	89	56 - 118	6	30
Hexachloroethane	<0.16	*	1.32	1.21		mg/Kg	☼	91	60 - 114	11	30
2-Chlorophenol	<0.16	*	1.32	1.26		mg/Kg	☼	96	64 - 110	4	30
Nitrobenzene	<0.032	*	1.32	1.25		mg/Kg	☼	94	60 - 116	12	30
Bis(2-chloroethoxy)methane	<0.16	*	1.32	1.28		mg/Kg	☼	97	60 - 112	2	30
1,2,4-Trichlorobenzene	<0.16	*	1.32	1.10		mg/Kg	☼	84	66 - 117	5	30
Isophorone	<0.16	*	1.32	1.25		mg/Kg	☼	95	55 - 110	6	30
2,4-Dimethylphenol	<0.32		1.32	1.33		mg/Kg	☼	100	60 - 110	4	30
Hexachlorobutadiene	<0.16		1.32	1.01		mg/Kg	☼	76	56 - 120	8	30
Naphthalene	<0.032		1.32	1.26		mg/Kg	☼	95	63 - 110	6	30
2,4-Dichlorophenol	<0.32		1.32	1.20		mg/Kg	☼	91	58 - 120	6	30
4-Chloroaniline	<0.66		1.32	0.995		mg/Kg	☼	75	30 - 150	2	30
2,4,6-Trichlorophenol	<0.32		1.32	1.08		mg/Kg	☼	81	57 - 120	0	30
2,4,5-Trichlorophenol	<0.32		1.32	1.10		mg/Kg	☼	83	50 - 120	0	30
Hexachlorocyclopentadiene	<0.66	F1	1.32	<0.66	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	<0.066		1.32	1.25		mg/Kg	☼	95	69 - 112	7	30
2-Nitroaniline	<0.16	*	1.32	1.13		mg/Kg	☼	86	57 - 124	4	30
2-Chloronaphthalene	<0.16		1.32	1.17		mg/Kg	☼	89	69 - 114	8	30
4-Chloro-3-methylphenol	<0.32		1.32	1.27		mg/Kg	☼	96	65 - 122	1	30
2,6-Dinitrotoluene	<0.16		1.32	1.36		mg/Kg	☼	103	70 - 123	2	30
2-Nitrophenol	<0.32		1.32	1.26		mg/Kg	☼	95	60 - 120	4	30
3-Nitroaniline	<0.32		1.32	0.949		mg/Kg	☼	72	40 - 122	6	30
Dimethyl phthalate	<0.16		1.32	1.22		mg/Kg	☼	92	69 - 116	7	30
2,4-Dinitrophenol	<0.66	*	2.64	1.52		mg/Kg	☼	58	10 - 100	14	30
Acenaphthylene	<0.032		1.32	1.27		mg/Kg	☼	96	68 - 120	1	30
2,4-Dinitrotoluene	<0.16		1.32	1.30		mg/Kg	☼	98	69 - 124	3	30
Acenaphthene	<0.032		1.32	1.23		mg/Kg	☼	93	65 - 124	7	30
Dibenzofuran	<0.16		1.32	1.21		mg/Kg	☼	92	66 - 115	8	30
4-Nitrophenol	<0.66		2.64	2.25		mg/Kg	☼	85	30 - 122	3	30
Fluorene	<0.032		1.32	1.25		mg/Kg	☼	94	62 - 120	1	30
4-Nitroaniline	<0.32		1.32	1.07		mg/Kg	☼	81	60 - 160	3	30
4-Bromophenyl phenyl ether	<0.16		1.32	1.16		mg/Kg	☼	88	68 - 118	4	30
Hexachlorobenzene	<0.066		1.32	1.04		mg/Kg	☼	79	63 - 124	7	30
Diethyl phthalate	<0.16		1.32	1.29		mg/Kg	☼	98	58 - 120	2	30
4-Chlorophenyl phenyl ether	<0.16		1.32	1.12		mg/Kg	☼	85	62 - 119	3	30
Pentachlorophenol	<0.66		2.64	0.858		mg/Kg	☼	32	13 - 112	19	30
N-Nitrosodiphenylamine	<0.16	* F1	1.32	1.51	F1	mg/Kg	☼	114	65 - 112	2	30
4,6-Dinitro-2-methylphenol	<0.66		2.64	2.26		mg/Kg	☼	85	10 - 110	5	30
Phenanthrene	0.0059	J	1.32	1.38		mg/Kg	☼	104	62 - 120	1	30
Anthracene	<0.032		1.32	1.34		mg/Kg	☼	101	70 - 114	3	30
Carbazole	<0.16		1.32	1.53		mg/Kg	☼	116	65 - 142	2	30
Di-n-butyl phthalate	<0.16		1.32	1.55		mg/Kg	☼	117	65 - 120	3	30
Fluoranthene	0.012	J	1.32	1.28		mg/Kg	☼	96	62 - 120	1	30
Pyrene	0.019	J	1.32	1.46		mg/Kg	☼	109	61 - 128	3	30
Butyl benzyl phthalate	<0.16	*	1.32	1.66		mg/Kg	☼	126	71 - 129	2	30
Benzo[a]anthracene	<0.032		1.32	1.29		mg/Kg	☼	98	67 - 122	0	30
Chrysene	<0.032		1.32	1.33		mg/Kg	☼	101	63 - 120	5	30
3,3'-Dichlorobenzidine	<0.16		1.32	0.933		mg/Kg	☼	71	35 - 128	1	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-173762-1 MSD

Matrix: Solid

Analysis Batch: 518566

Client Sample ID: 2615V2-01-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 518266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	<0.16		1.32	1.69		mg/Kg	☼	128	72 - 131	1	30
Di-n-octyl phthalate	<0.16		1.32	1.53		mg/Kg	☼	116	68 - 134	3	30
Benzo[b]fluoranthene	<0.032		1.32	1.40		mg/Kg	☼	106	69 - 129	0	30
Benzo[k]fluoranthene	<0.032		1.32	1.39		mg/Kg	☼	105	68 - 127	0	30
Benzo[a]pyrene	<0.032		1.32	1.42		mg/Kg	☼	108	65 - 133	1	30
Indeno[1,2,3-cd]pyrene	<0.032		1.32	1.65		mg/Kg	☼	125	68 - 130	2	30
Dibenz(a,h)anthracene	<0.032		1.32	1.51		mg/Kg	☼	114	64 - 131	2	30
Benzo[g,h,i]perylene	<0.032		1.32	1.46		mg/Kg	☼	111	72 - 131	1	30
3 & 4 Methylphenol	<0.16		1.32	1.21		mg/Kg	☼	91	57 - 120	5	30

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2-Fluorophenol	83		31 - 166
Phenol-d5	78		30 - 153
Nitrobenzene-d5	88		37 - 147
2-Fluorobiphenyl	90		43 - 145
2,4,6-Tribromophenol	57		31 - 143
Terphenyl-d14	92		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-517069/2-A

Matrix: Solid

Analysis Batch: 517762

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 517069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.520		mg/L		104	80 - 120
Beryllium	0.0500	0.0528		mg/L		106	80 - 120
Boron	1.00	0.917		mg/L		92	80 - 120
Cadmium	0.0500	0.0491		mg/L		98	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.500	0.519		mg/L		104	80 - 120
Lead	0.100	0.0966		mg/L		97	80 - 120
Manganese	0.500	0.525		mg/L		105	80 - 120
Nickel	0.500	0.518		mg/L		104	80 - 120
Selenium	0.100	0.0930		mg/L		93	80 - 120
Silver	0.0500	0.0482		mg/L		96	80 - 120
Zinc	0.500	0.519	^	mg/L		104	80 - 120

Lab Sample ID: LCS 500-517069/2-A

Matrix: Solid

Analysis Batch: 517892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 517069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.00	0.943		mg/L		94	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-517445/2-A
Matrix: Solid
Analysis Batch: 517765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517445
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.109		mg/L		109	80 - 120
Manganese	0.500	0.547		mg/L		109	80 - 120

Lab Sample ID: MB 500-518507/1-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.437	J	2.0	0.39	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Barium	<1.0		1.0	0.11	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Boron	<5.0		5.0	0.47	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Cadmium	0.0536	J	0.20	0.036	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Calcium	18.2	J	20	3.4	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Chromium	0.516	J	1.0	0.50	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Copper	<1.0		1.0	0.28	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Iron	<20		20	10	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Lead	<0.50		0.50	0.23	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Magnesium	12.8		10	5.0	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Potassium	<50		50	18	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Silver	<0.50		0.50	0.13	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Sodium	<100		100	15	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/03/19 17:42	12/04/19 15:26	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/03/19 17:42	12/04/19 15:26	1

Lab Sample ID: LCS 500-518507/2-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518507
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	48.1		mg/Kg		96	80 - 120
Arsenic	10.0	8.84		mg/Kg		88	80 - 120
Barium	200	187		mg/Kg		94	80 - 120
Beryllium	5.00	4.61		mg/Kg		92	80 - 120
Boron	100	85.4		mg/Kg		85	80 - 120
Cadmium	5.00	4.49		mg/Kg		90	80 - 120
Calcium	1000	933		mg/Kg		93	80 - 120
Chromium	20.0	18.6		mg/Kg		93	80 - 120
Cobalt	50.0	47.2		mg/Kg		94	80 - 120
Copper	25.0	24.1		mg/Kg		96	80 - 120
Iron	100	109		mg/Kg		109	80 - 120
Lead	10.0	9.16		mg/Kg		92	80 - 120
Magnesium	1000	908		mg/Kg		91	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518507/2-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	50.0	45.7		mg/Kg		91	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Potassium	1000	970		mg/Kg		97	80 - 120
Selenium	10.0	8.48		mg/Kg		85	80 - 120
Silver	5.00	4.35		mg/Kg		87	80 - 120
Sodium	1000	977		mg/Kg		98	80 - 120
Thallium	10.0	9.18		mg/Kg		92	80 - 120
Vanadium	50.0	46.6		mg/Kg		93	80 - 120
Zinc	50.0	45.5		mg/Kg		91	80 - 120

Lab Sample ID: 500-173762-1 MS
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.40	J B F1	24.7	16.4	F1	mg/Kg	☼	65	75 - 125
Arsenic	1.6		4.94	6.26		mg/Kg	☼	93	75 - 125
Barium	6.4		98.8	94.3		mg/Kg	☼	89	75 - 125
Beryllium	0.18	J	2.47	2.33		mg/Kg	☼	87	75 - 125
Boron	4.4		49.4	44.1		mg/Kg	☼	80	75 - 125
Cadmium	0.055	J B	2.47	2.28		mg/Kg	☼	90	75 - 125
Chromium	3.8	B	9.88	12.5		mg/Kg	☼	88	75 - 125
Cobalt	2.0		24.7	27.8		mg/Kg	☼	104	75 - 125
Copper	6.3		12.4	17.4		mg/Kg	☼	90	75 - 125
Iron	5200		49.4	4930	4	mg/Kg	☼	-626	75 - 125
Lead	2.9	F1 F2	4.94	15.3	F1	mg/Kg	☼	250	75 - 125
Manganese	170		24.7	167	4	mg/Kg	☼	2	75 - 125
Nickel	5.6		24.7	30.1		mg/Kg	☼	99	75 - 125
Potassium	420	F1	494	1230	F1	mg/Kg	☼	163	75 - 125
Selenium	<0.49		4.94	4.24		mg/Kg	☼	86	75 - 125
Silver	0.69		2.47	3.01		mg/Kg	☼	94	75 - 125
Sodium	430		494	915		mg/Kg	☼	98	75 - 125
Thallium	<0.49		4.94	4.13		mg/Kg	☼	84	75 - 125
Vanadium	8.1		24.7	31.3		mg/Kg	☼	94	75 - 125
Zinc	15		24.7	40.1		mg/Kg	☼	103	75 - 125

Lab Sample ID: 500-173762-1 MS
Matrix: Solid
Analysis Batch: 518953

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	90000	B	494	107000	4	mg/Kg	☼	3388	75 - 125
Magnesium	47000	B	494	58300	4	mg/Kg	☼	2312	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173762-1 MSD
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Antimony	0.40	J B F1	25.2	17.1	F1	mg/Kg	☼	66	75 - 125	4	20	
Arsenic	1.6		5.04	6.34		mg/Kg	☼	93	75 - 125	1	20	
Barium	6.4		101	95.2		mg/Kg	☼	88	75 - 125	1	20	
Beryllium	0.18	J	2.52	2.32		mg/Kg	☼	85	75 - 125	0	20	
Boron	4.4		50.4	43.3		mg/Kg	☼	77	75 - 125	2	20	
Cadmium	0.055	J B	2.52	2.31		mg/Kg	☼	89	75 - 125	2	20	
Chromium	3.8	B	10.1	12.5		mg/Kg	☼	86	75 - 125	0	20	
Cobalt	2.0		25.2	27.2		mg/Kg	☼	100	75 - 125	2	20	
Copper	6.3		12.6	16.4		mg/Kg	☼	80	75 - 125	6	20	
Iron	5200		50.4	4650	4	mg/Kg	☼	-1181	75 - 125	6	20	
Lead	2.9	F1 F2	5.04	8.24	F2	mg/Kg	☼	105	75 - 125	60	20	
Manganese	170		25.2	174	4	mg/Kg	☼	31	75 - 125	4	20	
Nickel	5.6		25.2	29.5		mg/Kg	☼	95	75 - 125	2	20	
Potassium	420	F1	504	1120	F1	mg/Kg	☼	137	75 - 125	10	20	
Selenium	<0.49		5.04	4.11		mg/Kg	☼	82	75 - 125	3	20	
Silver	0.69		2.52	3.11		mg/Kg	☼	96	75 - 125	3	20	
Sodium	430		504	907		mg/Kg	☼	95	75 - 125	1	20	
Thallium	<0.49		5.04	4.20		mg/Kg	☼	83	75 - 125	2	20	
Vanadium	8.1		25.2	30.5		mg/Kg	☼	89	75 - 125	3	20	
Zinc	15		25.2	38.7		mg/Kg	☼	96	75 - 125	4	20	

Lab Sample ID: 500-173762-1 MSD
Matrix: Solid
Analysis Batch: 518953

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Calcium	90000	B	504	112000	4	mg/Kg	☼	4372	75 - 125	5	20	
Magnesium	47000	B	504	57800	4	mg/Kg	☼	2162	75 - 125	1	20	

Lab Sample ID: 500-173762-1 DU
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
Antimony	0.40	J B F1	0.335	J	mg/Kg	☼	17	20
Arsenic	1.6		1.30	F5	mg/Kg	☼	23	20
Barium	6.4		6.09		mg/Kg	☼	5	20
Beryllium	0.18	J	0.129	J F5	mg/Kg	☼	31	20
Boron	4.4		5.22		mg/Kg	☼	18	20
Cadmium	0.055	J B	0.0783	J F5	mg/Kg	☼	35	20
Chromium	3.8	B	3.47		mg/Kg	☼	10	20
Cobalt	2.0		1.91		mg/Kg	☼	4	20
Copper	6.3		4.47	F3	mg/Kg	☼	35	20
Iron	5200		4030	F3	mg/Kg	☼	26	20
Lead	2.9	F1 F2	2.78		mg/Kg	☼	6	20
Manganese	170		162		mg/Kg	☼	3	20
Nickel	5.6		4.42	F3	mg/Kg	☼	24	20
Potassium	420	F1	423		mg/Kg	☼	0.5	20
Selenium	<0.49		<0.48		mg/Kg	☼	NC	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173762-1 DU
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Silver	0.69		0.882	F5	mg/Kg	☼	24	20
Sodium	430		412		mg/Kg	☼	4	20
Thallium	<0.49		<0.48		mg/Kg	☼	NC	20
Vanadium	8.1		7.35		mg/Kg	☼	10	20
Zinc	15		17.9	F3	mg/Kg	☼	21	20

Lab Sample ID: 500-173762-1 DU
Matrix: Solid
Analysis Batch: 518953

Client Sample ID: 2615V2-01-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 518507

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Calcium	90000	B	110000		mg/Kg	☼	20	20
Magnesium	47000	B	58200	F3	mg/Kg	☼	21	20

Lab Sample ID: LB 500-516884/1-B
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 21:31	1
Boron	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 21:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 21:31	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Cobalt	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Iron	<0.40		0.40	0.20	mg/L		11/24/19 16:20	11/27/19 21:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 21:31	1
Manganese	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Nickel	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 21:31	1
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 21:31	1
Zinc	0.0433	J ^	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 21:31	1

Lab Sample ID: LB2 500-516885/1-B
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB2	LB2	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 23:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/24/19 16:20	11/27/19 23:08	1
Boron	<0.50		0.50	0.050	mg/L		11/24/19 16:20	11/27/19 23:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/24/19 16:20	11/27/19 23:08	1
Chromium	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 23:08	1
Cobalt	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 23:08	1
Iron	<0.40		0.40	0.20	mg/L		11/24/19 16:20	11/27/19 23:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/24/19 16:20	11/27/19 23:08	1
Manganese	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 23:08	1
Nickel	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 23:08	1
Selenium	<0.050		0.050	0.020	mg/L		11/24/19 16:20	11/27/19 23:08	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB2 500-516885/1-B
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.025		0.025	0.010	mg/L		11/24/19 16:20	11/27/19 23:08	1
Zinc	<0.50	^	0.50	0.020	mg/L		11/24/19 16:20	11/27/19 23:08	1

Lab Sample ID: 500-173762-11 MS
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: TCLP
Prep Batch: 517069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.39	J	0.500	0.939		mg/L		109	75 - 125
Beryllium	<0.0040		0.0500	0.0476		mg/L		95	75 - 125
Boron	0.12	J	1.00	1.01		mg/L		89	75 - 125
Cadmium	0.0032	J	0.0500	0.0581		mg/L		110	75 - 125
Chromium	<0.025		0.200	0.184		mg/L		92	75 - 125
Cobalt	0.022	J	0.500	0.565		mg/L		109	75 - 125
Iron	0.23	J	1.00	1.25		mg/L		102	75 - 125
Lead	0.019		0.100	0.120		mg/L		101	75 - 125
Manganese	2.1		0.500	2.74	4	mg/L		128	75 - 125
Nickel	0.034		0.500	0.570		mg/L		107	75 - 125
Selenium	<0.050		0.100	0.110		mg/L		110	75 - 125
Silver	<0.025		0.0500	0.0591		mg/L		118	75 - 125
Zinc	0.14	J B ^	0.500	0.738	^	mg/L		120	75 - 125

Lab Sample ID: 500-173762-11 DU
Matrix: Solid
Analysis Batch: 517762

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: TCLP
Prep Batch: 517069

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.39	J	0.413	J	mg/L		5	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.12	J	0.127	J	mg/L		4	20
Cadmium	0.0032	J	0.00373	J	mg/L		16	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.022	J	0.0239	J	mg/L		7	20
Iron	0.23	J	0.223	J	mg/L		3	20
Lead	0.019		0.0138	F5	mg/L		31	20
Manganese	2.1		2.19		mg/L		4	20
Nickel	0.034		0.0350		mg/L		4	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.14	J B ^	0.144	J ^	mg/L		3	20

Lab Sample ID: LB 500-517216/1-B
Matrix: Solid
Analysis Batch: 517765

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 517445

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/26/19 15:31	11/27/19 13:21	1
Manganese	<0.025		0.025	0.010	mg/L		11/26/19 15:31	11/27/19 13:21	1

Eurolins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173762-11 MS
Matrix: Solid
Analysis Batch: 517765

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: SPLP East
Prep Batch: 517445

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier		Result	Qualifier					
Lead	<0.0075		0.100	0.100		mg/L		100	75 - 125	
Manganese	<0.025		0.500	0.478		mg/L		96	75 - 125	

Lab Sample ID: 500-173762-11 DU
Matrix: Solid
Analysis Batch: 517765

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: SPLP East
Prep Batch: 517445

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	<0.025		<0.025		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-517069/2-A
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517069

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.526		mg/L		105	80 - 120
Thallium	0.100	0.0921		mg/L		92	80 - 120

Lab Sample ID: LB 500-516884/1-B
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 00:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 00:14	1

Lab Sample ID: LB2 500-516885/1-B
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517069

Analyte	LB2	LB2	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		11/24/19 16:20	11/28/19 01:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/24/19 16:20	11/28/19 01:13	1

Lab Sample ID: 500-173762-11 MS
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: TCLP
Prep Batch: 517069

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier		Result	Qualifier					
Antimony	<0.0060		0.500	0.509		mg/L		102	75 - 125	
Thallium	<0.0020		0.100	0.0926		mg/L		93	75 - 125	

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-173762-11 DU
Matrix: Solid
Analysis Batch: 517827

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: TCLP
Prep Batch: 517069

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-517185/12-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517185

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:19	1

Lab Sample ID: LCS 500-517185/13-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517185

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Mercury	0.00200	0.00204		mg/L		102	80 - 120

Lab Sample ID: MB 500-517187/12-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517187

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 08:38	1

Lab Sample ID: LCS 500-517187/13-A
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517187

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Mercury	0.00200	0.00206		mg/L		103	80 - 120

Lab Sample ID: LB2 500-516885/1-C
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517185

Analyte	LB2	LB2	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 09:27	1

Lab Sample ID: LB 500-516884/1-C
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 517187

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		11/25/19 10:00	11/26/19 08:41	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-173762-3 MS
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: 2615V2-01-B05 (12-18)
Prep Type: TCLP
Prep Batch: 517187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00102		mg/L		102	75 - 125

Lab Sample ID: 500-173762-3 DU
Matrix: Solid
Analysis Batch: 517394

Client Sample ID: 2615V2-01-B05 (12-18)
Prep Type: TCLP
Prep Batch: 517187

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-518179/12-A
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/02/19 15:05	12/03/19 07:37	1

Lab Sample ID: LCS 500-518179/13-A
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.143		mg/Kg		86	80 - 120

Lab Sample ID: 500-173762-10 MS
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: 2615V2-01-B24 (0-4)
Prep Type: Total/NA
Prep Batch: 518179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.012	J	0.0859	0.0904		mg/Kg	☼	91	75 - 125

Lab Sample ID: 500-173762-10 MSD
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: 2615V2-01-B24 (0-4)
Prep Type: Total/NA
Prep Batch: 518179

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.012	J	0.0859	0.0877		mg/Kg	☼	88	75 - 125	3	20

Lab Sample ID: 500-173762-10 DU
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: 2615V2-01-B24 (0-4)
Prep Type: Total/NA
Prep Batch: 518179

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.012	J	0.0119	J	mg/Kg	☼	0.8	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Method: 9045D - pH

Lab Sample ID: 500-173762-11 DU
Matrix: Solid
Analysis Batch: 517162

Client Sample ID: 2615V2-01-B27 (0-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.7		8.6		SU		0.6	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B05 (0-6)

Lab Sample ID: 500-173762-1

Date Collected: 11/19/19 23:00

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:42	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 21:56	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:28	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:53	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B05 (0-6)

Lab Sample ID: 500-173762-1

Date Collected: 11/19/19 23:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 96.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 12:16	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 13:57	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 15:42	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 09:57	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:42	MJG	TAL CHI

Client Sample ID: 2615V2-01-B05 (6-12)

Lab Sample ID: 500-173762-2

Date Collected: 11/19/19 23:10

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:46	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:00	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B05 (6-12)

Lab Sample ID: 500-173762-2

Date Collected: 11/19/19 23:10

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:38	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:55	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 09:39		
					(End)	11/25/19 08:42		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B05 (6-12)

Lab Sample ID: 500-173762-2

Date Collected: 11/19/19 23:10

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 12:41	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 14:24	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:02	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 10:18	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:44	MJG	TAL CHI

Client Sample ID: 2615V2-01-B05 (12-18)

Lab Sample ID: 500-173762-3

Date Collected: 11/19/19 23:17

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:51	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:12	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:41	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 08:56	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B05 (12-18)

Lab Sample ID: 500-173762-3

Date Collected: 11/19/19 23:17

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B05 (12-18)

Lab Sample ID: 500-173762-3

Date Collected: 11/19/19 23:17

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 13:07	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 14:52	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:15	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 10:58	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:46	MJG	TAL CHI

Client Sample ID: 2615V2-01-B06 (0-6)

Lab Sample ID: 500-173762-4

Date Collected: 11/19/19 23:51

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:55	JEF	TAL CHI
TCLP	Leach	1311			516885	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 23:12	JEF	TAL CHI
TCLP	Leach	1311			516885	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 01:15	FXG	TAL CHI
TCLP	Leach	1311			516885	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517185	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 10:51		
					(End)	11/25/19 09:39		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B06 (0-6)

Lab Sample ID: 500-173762-4

Date Collected: 11/19/19 23:51

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 13:33	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		5	518840	12/05/19 10:50	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:19	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:02	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:48	MJG	TAL CHI

Client Sample ID: 2615V2-01-B06 (6-12)

Lab Sample ID: 500-173762-5

Date Collected: 11/20/19 00:00

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 13:59	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:16	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:43	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:01	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	(Start) 11/25/19 10:51 (End) 11/25/19 09:39	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B06 (6-12)

Lab Sample ID: 500-173762-5

Date Collected: 11/20/19 00:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 13:58	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 15:48	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:23	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B06 (6-12)

Lab Sample ID: 500-173762-5

Date Collected: 11/20/19 00:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:07	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:50	MJG	TAL CHI

Client Sample ID: 2615V2-01-B06 (12-19)

Lab Sample ID: 500-173762-6

Date Collected: 11/20/19 00:11

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 14:12	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:21	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:46	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:03	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 10:51		
					(End)	11/25/19 09:39		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B06 (12-19)

Lab Sample ID: 500-173762-6

Date Collected: 11/20/19 00:11

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 14:24	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 15:20	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:27	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:20	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:52	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B04 (0-5)

Lab Sample ID: 500-173762-7

Date Collected: 11/20/19 01:05

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 14:16	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:25	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:48	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 10:51		
					(End)	11/25/19 09:39		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B04 (0-5)

Lab Sample ID: 500-173762-7

Date Collected: 11/20/19 01:05

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 14:50	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518840	12/05/19 16:18	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:31	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:24	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 07:54	MJG	TAL CHI

Client Sample ID: 2615V2-01-B04 (5-9)

Lab Sample ID: 500-173762-8

Date Collected: 11/20/19 01:10

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 14:21	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:29	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B04 (5-9)

Lab Sample ID: 500-173762-8

Date Collected: 11/20/19 01:10

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:51	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:13	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 10:51		
					(End)	11/25/19 09:39		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B04 (5-9)

Lab Sample ID: 500-173762-8

Date Collected: 11/20/19 01:10

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 15:16	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 16:44	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:35	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:29	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 08:01	MJG	TAL CHI

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 14:25	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:33	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:53	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:15	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B07 (0-6)

Lab Sample ID: 500-173762-9

Date Collected: 11/20/19 01:30

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 15:41	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518840	12/05/19 15:51	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:39	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:33	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 08:03	MJG	TAL CHI

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Date Collected: 11/20/19 02:45

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 11:55	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 14:29	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:38	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 00:56	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:16	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 10:51		
					(End)	11/25/19 09:39		
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B24 (0-4)

Lab Sample ID: 500-173762-10

Date Collected: 11/20/19 02:45

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 16:07	PMF	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 17:40	AJD	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:43	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:37	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 08:05	MJG	TAL CHI

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517216	11/25/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			517445	11/26/19 15:31	BDE	TAL CHI
SPLP East	Analysis	6010B		1	517765	11/27/19 14:34	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6010B		1	517762	11/27/19 22:42	JEF	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	3010A			517069	11/24/19 16:20	BDE	TAL CHI
TCLP	Analysis	6020A		1	517827	11/28/19 01:03	FXG	TAL CHI
TCLP	Leach	1311			516884	11/22/19 11:45	GCA	TAL CHI
TCLP	Prep	7470A			517187	11/25/19 10:00	MJG	TAL CHI
TCLP	Analysis	7470A		1	517394	11/26/19 09:18	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162	(Start) 11/25/19 10:51 (End) 11/25/19 09:39	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	516842	11/22/19 10:07	LWN	TAL CHI

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			517990	11/20/19 18:00	PMF	TAL CHI
Total/NA	Analysis	8260B		1	517969	11/30/19 16:33	PMF	TAL CHI
Total/NA	Prep	3541	DL		518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D	DL	2	518840	12/05/19 14:29	AJD	TAL CHI
Total/NA	Prep	3541			518266	12/02/19 19:13	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518566	12/04/19 18:07	AJD	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Client Sample ID: 2615V2-01-B27 (0-4)

Lab Sample ID: 500-173762-11

Date Collected: 11/20/19 03:00

Matrix: Solid

Date Received: 11/20/19 12:00

Percent Solids: 81.8

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 16:47	EEN	TAL CHI
Total/NA	Prep	3050B			518507	12/03/19 17:42	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518953	12/05/19 11:42	JEF	TAL CHI
Total/NA	Prep	7471B			518179	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 08:13	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173762-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60461
 Phone: 708.534.5200 Fax: 708.534.5



500-173762 COC

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173762
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: 5.6

Client		Client Project #		Preservative								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Lab Project #		Parameter								
Project Location/State		Lab PM										
Sampler												
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/TEHP Metals	pH	Percent Solids	Comments
1		2615V2-01-B05 (0-6)	11/19/19	2300	5	S	X	X	X	X	X	
2		2615V2-01-B05 (6-12)	11/19/19	2310	5	S	X	X	X	X	X	
3		2615V2-01-B05 (12-18)	11/19/19	2317	5	S	X	X	X	X	X	
4		2615V2-01-B06 (0-6)	11/19/19	2351	5	S	X	X	X	X	X	
5		2615V2-01-B06 (6-12)	11/20/19	2400	5	S	X	X	X	X	X	
6		2615V2-01-B06 (12-19)	11/20/19	0011	5	S	X	X	X	X	X	
7		2615V2-01-B04 (0-5)	11/20/19	0105	5	S	X	X	X	X	X	
8		2615V2-01-B04 (5-9)	11/20/19	0110	5	S	X	X	X	X	X	
9		2615V2-01-B07 (0-6)	11/20/19	0130	5	S	X	X	X	X	X	

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other
 Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>E+E</u>	Date: <u>11/20/19</u>	Time: <u>0930</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/20/19</u>	Time: <u>0930</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/20/19</u>	Time: <u>1200</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CHT</u>	Date: <u>11/20/19</u>	Time: <u>1200</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173762

Chain of Custody Number: _____

Page _____ of _____

Temperature °C of Cooler: 5.6

48pt

Client		Client Project #		Preservative		Parameter						Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Project Location/State		Lab Project #		Sampler						
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/TCMP Metals	pH	Percent Solids	
E+E		1009341.0447.01										
176-001-WO47E		Chicago, IL				AH, JH						
						R. Wright						
10		2615V2-01-B24(0-4)	11/20/19	0245	5	S	X	X	X	X	X	
11		2615V2-01-B27(0-4)	11/20/19	0300	5	S	X	X	X	X	X	

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date _____

Relinquished By <u>J. Paul</u> Company: <u>E+E</u> Date: <u>11/20/19</u> Time: <u>0930</u>	Received By <u>P. Neal</u> Company: <u>TA</u> Date: <u>11/20/19</u> Time: <u>0930</u>	Lab Courier <u>TD</u>
Relinquished By <u>P. Neal</u> Company: <u>TA</u> Date: <u>11/20/19</u> Time: <u>1200</u>	Received By <u>Shirley Scott</u> Company: <u>TA-EPT</u> Date: <u>11/20/19</u> Time: <u>1200</u>	Shipped _____
Relinquished By _____ Company: _____ Date: _____ Time: _____	Received By _____ Company: _____ Date: _____ Time: _____	Hand Delivered _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173762-1

Login Number: 173762

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173939-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/6/2019 5:23:13 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Job ID: 500-173939-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173939-1

Receipt

The samples were received on 11/21/2019 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.8° C and 5.3° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-518520 and analytical batch 500-518553 recovered above the control limits for the following analytes: Nitrobenzene, Bis(2-chloroethyl)ether, Isophorone, Phenol, N-Nitrosodi-n-propylamine, 2-Methylphenol, 2-Chlorophenol, 2,2'-oxybis[1-chloropropane], Bis(2-chloroethoxy)methane and Hexachloroethane. These analytes were biased high in the LCS and were not detected above the reporting limit in the associated samples; therefore, the data have been reported. The following analyte was below the QC limits: 2,4-Dinitrophenol. No corrective action was required per SOP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The laboratory control sample (LCS) for preparation batch 500-517877 and 500-518493 and analytical batch 500-518818 recovered outside control limits for the following analytes: Lead. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00084	J	0.0035	0.00056	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.22		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.013	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.054		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J B	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	29		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.51		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	14	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	61000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	13	B	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	29000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.61		0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.7		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	870		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.97		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.50		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.052	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.086		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.089	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.43		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.019		0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.14		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.74	J B	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	15	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	61000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (5-10) (Continued)

Lab Sample ID: 500-173939-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	27		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.60	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.76		0.60	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	480		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.94		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.051		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.015	J	0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.015	J	0.041	0.0063	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.093		0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.044		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzof[g,h,i]perylene	0.027	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.67	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.8	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.078	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.28	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.75		0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (10-15) (Continued)

Lab Sample ID: 500-173939-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	20		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.075	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.15	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173939-1	2615V2-AI-B28 (0-5)	Solid	11/21/19 12:35	11/21/19 16:00	
500-173939-2	2615V2-AI-B28 (5-10)	Solid	11/21/19 12:40	11/21/19 16:00	
500-173939-3	2615V2-AI-B28 (10-15)	Solid	11/21/19 12:50	11/21/19 16:00	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Date Collected: 11/21/19 12:35

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 87.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Acetone	0.012	J	0.017	0.0076	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Chlorobenzene	<0.0017		0.0017	0.00065	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Tetrachloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00078	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1
Xylenes, Total	0.00084	J	0.0035	0.00056	mg/Kg	☼	11/22/19 18:15	12/03/19 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/22/19 18:15	12/03/19 12:44	1
4-Bromofluorobenzene (Surr)	126		75 - 131	11/22/19 18:15	12/03/19 12:44	1
Dibromofluoromethane	92		75 - 126	11/22/19 18:15	12/03/19 12:44	1
Toluene-d8 (Surr)	101		75 - 124	11/22/19 18:15	12/03/19 12:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.083	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Bis(2-chloroethyl)ether	<0.19	*	0.19	0.056	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Date Collected: 11/21/19 12:35

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 87.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2-Methylphenol	<0.19	*	0.19	0.060	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,2'-oxybis[1-chloropropane]	<0.19	*	0.19	0.043	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
N-Nitrosodi-n-propylamine	<0.075	*	0.075	0.046	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Hexachloroethane	<0.19	*	0.19	0.057	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2-Chlorophenol	<0.19	*	0.19	0.064	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Nitrobenzene	<0.037	*	0.037	0.0093	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Bis(2-chloroethoxy)methane	<0.19	*	0.19	0.038	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Isophorone	<0.19	*	0.19	0.042	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2-Nitroaniline	<0.19	*	0.19	0.050	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,4-Dinitrophenol	<0.75	*	0.75	0.66	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Phenanthrene	0.22		0.037	0.0052	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Benzo[a]anthracene	0.013 J		0.037	0.0050	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Date Collected: 11/21/19 12:35

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 87.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.054		0.037	0.010	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/03/19 21:30	12/06/19 00:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		31 - 166				12/03/19 21:30	12/06/19 00:54	1
Phenol-d5	94		30 - 153				12/03/19 21:30	12/06/19 00:54	1
Nitrobenzene-d5	109		37 - 147				12/03/19 21:30	12/06/19 00:54	1
2-Fluorobiphenyl	94		43 - 145				12/03/19 21:30	12/06/19 00:54	1
2,4,6-Tribromophenol	71		31 - 143				12/03/19 21:30	12/06/19 00:54	1
Terphenyl-d14	126		42 - 157				12/03/19 21:30	12/06/19 00:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J B	1.1	0.21	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Arsenic	7.3		0.54	0.18	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Barium	29		0.54	0.061	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Beryllium	0.51		0.22	0.050	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Boron	14	B	2.7	0.25	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Cadmium	0.090	J B	0.11	0.019	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Calcium	61000	B	110	18	mg/Kg	☼	12/03/19 17:54	12/05/19 11:29	10
Chromium	13	B	0.54	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Cobalt	13		0.27	0.071	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Copper	28		0.54	0.15	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Iron	16000		11	5.6	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Lead	16		0.27	0.12	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Magnesium	29000	B	5.4	2.7	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Manganese	330		0.54	0.078	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Nickel	35		0.54	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Potassium	2500		27	9.5	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Selenium	0.61		0.54	0.32	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Silver	1.7		0.27	0.070	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Sodium	870		54	8.0	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Thallium	0.97		0.54	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Vanadium	16		0.27	0.064	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1
Zinc	45		1.1	0.47	mg/Kg	☼	12/03/19 17:54	12/04/19 17:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 15:33	1
Boron	0.052	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Date Collected: 11/21/19 12:35

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 87.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 15:33	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:33	1
Cobalt	0.039		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:33	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 15:33	1
Lead	<0.0075 *		0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 15:33	1
Manganese	1.6		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:33	1
Nickel	0.086		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:33	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 15:33	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:33	1
Zinc	0.089	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 15:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.43		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 21:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/04/19 23:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/04/19 23:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 07:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.018	0.0061	mg/Kg	☼	12/02/19 15:05	12/03/19 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.2	0.2	SU			11/25/19 12:28	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Acetone	0.019		0.017	0.0074	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/22/19 18:15	12/03/19 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/22/19 18:15	12/03/19 13:09	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/22/19 18:15	12/03/19 13:09	1
Dibromofluoromethane	91		75 - 126	11/22/19 18:15	12/03/19 13:09	1
Toluene-d8 (Surr)	96		75 - 124	11/22/19 18:15	12/03/19 13:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.088	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Bis(2-chloroethyl)ether	<0.20	*	0.20	0.059	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2-Methylphenol	<0.20	*	0.20	0.063	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,2'-oxybis[1-chloropropane]	<0.20	*	0.20	0.046	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
N-Nitrosodi-n-propylamine	<0.080	*	0.080	0.048	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Hexachloroethane	<0.20	*	0.20	0.060	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2-Chlorophenol	<0.20	*	0.20	0.067	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Nitrobenzene	<0.039	*	0.039	0.0098	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Bis(2-chloroethoxy)methane	<0.20	*	0.20	0.040	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Isophorone	<0.20	*	0.20	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2-Nitroaniline	<0.20	*	0.20	0.053	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,4-Dinitrophenol	<0.80	*	0.80	0.69	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Phenanthrene	0.14		0.039	0.0055	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/03/19 21:30	12/06/19 01:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		31 - 166				12/03/19 21:30	12/06/19 01:17	1
Phenol-d5	87		30 - 153				12/03/19 21:30	12/06/19 01:17	1
Nitrobenzene-d5	106		37 - 147				12/03/19 21:30	12/06/19 01:17	1
2-Fluorobiphenyl	92		43 - 145				12/03/19 21:30	12/06/19 01:17	1
2,4,6-Tribromophenol	67		31 - 143				12/03/19 21:30	12/06/19 01:17	1
Terphenyl-d14	125		42 - 157				12/03/19 21:30	12/06/19 01:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J B	1.2	0.24	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Arsenic	7.5		0.60	0.21	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Barium	36		0.60	0.069	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Beryllium	0.59		0.24	0.056	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Boron	15	B	3.0	0.28	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Cadmium	0.13	B	0.12	0.022	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Calcium	61000	B	120	20	mg/Kg	☼	12/03/19 17:54	12/05/19 11:33	10
Chromium	15	B	0.60	0.30	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Cobalt	14		0.30	0.079	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Copper	27		0.60	0.17	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Iron	19000		12	6.3	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Lead	14		0.30	0.14	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Magnesium	25000	B	6.0	3.0	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Manganese	340		0.60	0.088	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Nickel	36		0.60	0.18	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Potassium	2700		30	11	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Selenium	0.76		0.60	0.36	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Silver	2.0		0.30	0.078	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Sodium	480		60	8.9	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Thallium	0.94		0.60	0.30	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Vanadium	18		0.30	0.071	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1
Zinc	56		1.2	0.53	mg/Kg	☼	12/03/19 17:54	12/04/19 17:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 15:38	1
Boron	0.074	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 15:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:38	1
Cobalt	0.019	J	0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:38	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 15:38	1
Lead	<0.0075	*	0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 15:38	1
Manganese	2.0		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:38	1
Nickel	0.051		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 15:38	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:38	1
Zinc	<0.50		0.50	0.020	mg/L		12/03/19 15:52	12/04/19 15:38	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		12/03/19 15:50	12/04/19 21:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/04/19 23:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/04/19 23:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0066	mg/Kg	☼	12/02/19 15:05	12/03/19 10:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/25/19 12:28	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Acetone	0.015	J	0.017	0.0075	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	11/22/19 18:15	12/03/19 13:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/22/19 18:15	12/03/19 13:35	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/22/19 18:15	12/03/19 13:35	1
Dibromofluoromethane	91		75 - 126	11/22/19 18:15	12/03/19 13:35	1
Toluene-d8 (Surr)	96		75 - 124	11/22/19 18:15	12/03/19 13:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Bis(2-chloroethyl)ether	<0.21	*	0.21	0.061	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1

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Client Sample Results

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Job ID: 500-173939-1

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Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.047	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
N-Nitrosodi-n-propylamine	<0.082	*	0.082	0.050	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Hexachloroethane	<0.21	*	0.21	0.062	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Bis(2-chloroethoxy)methane	<0.21	*	0.21	0.042	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Naphthalene	0.015	J	0.041	0.0063	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2-Methylnaphthalene	0.093		0.082	0.0075	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2-Nitroaniline	<0.21	*	0.21	0.055	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Phenanthrene	0.16		0.041	0.0057	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.044		0.041	0.011	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Benzo[g,h,i]perylene	0.027	J	0.041	0.013	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/03/19 21:30	12/06/19 13:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		31 - 166				12/03/19 21:30	12/06/19 13:17	1
Phenol-d5	84		30 - 153				12/03/19 21:30	12/06/19 13:17	1
Nitrobenzene-d5	101		37 - 147				12/03/19 21:30	12/06/19 13:17	1
2-Fluorobiphenyl	89		43 - 145				12/03/19 21:30	12/06/19 13:17	1
2,4,6-Tribromophenol	59		31 - 143				12/03/19 21:30	12/06/19 13:17	1
Terphenyl-d14	119		42 - 157				12/03/19 21:30	12/06/19 13:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.67	J B	1.1	0.22	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Arsenic	7.6		0.57	0.19	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Barium	40		0.57	0.065	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Beryllium	0.67		0.23	0.053	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Boron	17	B	2.8	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Cadmium	0.078	J B	0.11	0.021	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Calcium	59000	B	110	19	mg/Kg	☼	12/03/19 17:54	12/05/19 11:37	10
Chromium	17	B	0.57	0.28	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Cobalt	15		0.28	0.075	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Copper	26		0.57	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Iron	19000		11	5.9	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Lead	14		0.28	0.13	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Magnesium	24000	B	5.7	2.8	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Manganese	310		0.57	0.083	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Nickel	38		0.57	0.17	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Potassium	2900		28	10	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Selenium	0.75		0.57	0.33	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Silver	2.2		0.28	0.073	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Sodium	210		57	8.4	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Thallium	0.90		0.57	0.28	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Vanadium	20		0.28	0.067	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1
Zinc	52		1.1	0.50	mg/Kg	☼	12/03/19 17:54	12/04/19 17:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 15:42	1
Boron	0.075	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 15:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:42	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:42	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 15:42	1
Lead	<0.0075	*	0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 15:42	1
Manganese	1.7		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:42	1
Nickel	0.041		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 15:42	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:42	1
Zinc	0.15	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 15:42	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.025		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 21:38	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/04/19 23:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/04/19 23:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.020	0.0067	mg/Kg	☼	12/02/19 15:05	12/03/19 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			11/27/19 10:56	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

GC/MS VOA

Prep Batch: 518045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	5035	
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	5035	
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	5035	

Analysis Batch: 518336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	8260B	518045
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	8260B	518045
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	8260B	518045
MB 500-518336/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-518336/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-518336/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 518520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	3541	
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	3541	
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	3541	
MB 500-518520/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-518520/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 518553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-518520/1-A	Method Blank	Total/NA	Solid	8270D	518520
LCS 500-518520/2-A	Lab Control Sample	Total/NA	Solid	8270D	518520

Analysis Batch: 518922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	8270D	518520
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	8270D	518520

Analysis Batch: 519122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	8270D	518520

Metals

Leach Batch: 517874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	SPLP East	Solid	1312	
500-173939-2	2615V2-AI-B28 (5-10)	SPLP East	Solid	1312	
500-173939-3	2615V2-AI-B28 (10-15)	SPLP East	Solid	1312	
LB 500-517874/1-B	Method Blank	SPLP East	Solid	1312	

Leach Batch: 517877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	TCLP	Solid	1311	
500-173939-2	2615V2-AI-B28 (5-10)	TCLP	Solid	1311	
500-173939-3	2615V2-AI-B28 (10-15)	TCLP	Solid	1311	
LB 500-517877/1-B	Method Blank	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Metals (Continued)

Leach Batch: 517877 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-517877/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 518206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	7471B	
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	7471B	
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	7471B	
MB 500-518206/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-518206/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 518400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	TCLP	Solid	7470A	517877
500-173939-2	2615V2-AI-B28 (5-10)	TCLP	Solid	7470A	517877
500-173939-3	2615V2-AI-B28 (10-15)	TCLP	Solid	7470A	517877
LB 500-517877/1-B	Method Blank	TCLP	Solid	7470A	517877
MB 500-518400/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-518400/13-A	Lab Control Sample	Total/NA	Solid	7470A	
LCS 500-518400/37-A	Lab Control Sample Dup	Total/NA	Solid	7470A	

Analysis Batch: 518416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	7471B	518206
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	7471B	518206
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	7471B	518206
MB 500-518206/12-A	Method Blank	Total/NA	Solid	7471B	518206
LCS 500-518206/13-A	Lab Control Sample	Total/NA	Solid	7471B	518206

Prep Batch: 518491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	SPLP East	Solid	3010A	517874
500-173939-2	2615V2-AI-B28 (5-10)	SPLP East	Solid	3010A	517874
500-173939-3	2615V2-AI-B28 (10-15)	SPLP East	Solid	3010A	517874
LB 500-517874/1-B	Method Blank	SPLP East	Solid	3010A	517874
LCS 500-518491/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 518493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	TCLP	Solid	3010A	517877
500-173939-2	2615V2-AI-B28 (5-10)	TCLP	Solid	3010A	517877
500-173939-3	2615V2-AI-B28 (10-15)	TCLP	Solid	3010A	517877
LB 500-517877/1-C	Method Blank	TCLP	Solid	3010A	517877
LCS 500-518493/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 518510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	3050B	
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	3050B	
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	3050B	
MB 500-518510/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518510/2-A	Lab Control Sample	Total/NA	Solid	3050B	

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Metals

Analysis Batch: 518657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	TCLP	Solid	7470A	518400
500-173939-2	2615V2-AI-B28 (5-10)	TCLP	Solid	7470A	518400
500-173939-3	2615V2-AI-B28 (10-15)	TCLP	Solid	7470A	518400
LB 500-517877/1-B	Method Blank	TCLP	Solid	7470A	518400
MB 500-518400/12-A	Method Blank	Total/NA	Solid	7470A	518400
LCS 500-518400/13-A	Lab Control Sample	Total/NA	Solid	7470A	518400
LCSD 500-518400/37-A	Lab Control Sample Dup	Total/NA	Solid	7470A	518400

Analysis Batch: 518808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	SPLP East	Solid	6010B	518491
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	6010B	518510
500-173939-2	2615V2-AI-B28 (5-10)	SPLP East	Solid	6010B	518491
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	6010B	518510
500-173939-3	2615V2-AI-B28 (10-15)	SPLP East	Solid	6010B	518491
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	6010B	518510
LB 500-517874/1-B	Method Blank	SPLP East	Solid	6010B	518491
MB 500-518510/1-A	Method Blank	Total/NA	Solid	6010B	518510
LCS 500-518491/2-A	Lab Control Sample	Total/NA	Solid	6010B	518491
LCS 500-518510/2-A	Lab Control Sample	Total/NA	Solid	6010B	518510

Analysis Batch: 518818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	TCLP	Solid	6010B	518493
500-173939-2	2615V2-AI-B28 (5-10)	TCLP	Solid	6010B	518493
500-173939-3	2615V2-AI-B28 (10-15)	TCLP	Solid	6010B	518493
LB 500-517877/1-C	Method Blank	TCLP	Solid	6010B	518493
LCS 500-518493/2-A	Lab Control Sample	Total/NA	Solid	6010B	518493

Analysis Batch: 518854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	TCLP	Solid	6020A	518493
500-173939-2	2615V2-AI-B28 (5-10)	TCLP	Solid	6020A	518493
500-173939-3	2615V2-AI-B28 (10-15)	TCLP	Solid	6020A	518493
LB 500-517877/1-C	Method Blank	TCLP	Solid	6020A	518493
LCS 500-518493/2-A	Lab Control Sample	Total/NA	Solid	6020A	518493

Analysis Batch: 518947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	6010B	518510
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	6010B	518510
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	6010B	518510

General Chemistry

Analysis Batch: 517162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	9045D	
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	9045D	
LCS 500-517162/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-517162/6	Lab Control Sample Dup	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

General Chemistry (Continued)

Analysis Batch: 517162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1 DU	2615V2-AI-B28 (0-5)	Total/NA	Solid	9045D	

Analysis Batch: 517182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-1	2615V2-AI-B28 (0-5)	Total/NA	Solid	Moisture	
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	Moisture	

Analysis Batch: 517343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-2	2615V2-AI-B28 (5-10)	Total/NA	Solid	Moisture	

Analysis Batch: 517553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173939-3	2615V2-AI-B28 (10-15)	Total/NA	Solid	9045D	
LCS 500-517553/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-517553/6	Lab Control Sample Dup	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-173939-1	2615V2-AI-B28 (0-5)	93	126	92	101
500-173939-2	2615V2-AI-B28 (5-10)	94	101	91	96
500-173939-3	2615V2-AI-B28 (10-15)	96	102	91	96
LCS 500-518336/4	Lab Control Sample	86	93	89	97
LCSD 500-518336/5	Lab Control Sample Dup	89	93	88	96
MB 500-518336/7	Method Blank	90	100	87	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173939-1	2615V2-AI-B28 (0-5)	83	94	109	94	71	126
500-173939-2	2615V2-AI-B28 (5-10)	80	87	106	92	67	125
500-173939-3	2615V2-AI-B28 (10-15)	80	84	101	89	59	119
LCS 500-518520/2-A	Lab Control Sample	141	140	113	100	81	97
MB 500-518520/1-A	Method Blank	138	128	108	90	62	95

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518336/7
Matrix: Solid
Analysis Batch: 518336

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/03/19 11:27	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/03/19 11:27	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/03/19 11:27	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/03/19 11:27	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/03/19 11:27	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/03/19 11:27	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/03/19 11:27	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/03/19 11:27	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/03/19 11:27	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/03/19 11:27	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/03/19 11:27	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/03/19 11:27	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/03/19 11:27	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/03/19 11:27	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/03/19 11:27	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/03/19 11:27	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/03/19 11:27	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/03/19 11:27	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/03/19 11:27	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/03/19 11:27	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/03/19 11:27	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/03/19 11:27	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/03/19 11:27	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/03/19 11:27	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/03/19 11:27	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/03/19 11:27	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/03/19 11:27	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/03/19 11:27	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/03/19 11:27	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/03/19 11:27	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/03/19 11:27	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/03/19 11:27	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/03/19 11:27	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/03/19 11:27	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/03/19 11:27	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/03/19 11:27	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/03/19 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/03/19 11:27	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/03/19 11:27	1
Dibromofluoromethane	87		75 - 126		12/03/19 11:27	1
Toluene-d8 (Surr)	94		75 - 124		12/03/19 11:27	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518336/4

Matrix: Solid

Analysis Batch: 518336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0411		mg/Kg		82	70 - 122
1,1,2-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 125
1,1-Dichloroethane	0.0500	0.0457		mg/Kg		91	70 - 125
1,1-Dichloroethene	0.0500	0.0476		mg/Kg		95	70 - 120
1,2-Dichloroethane	0.0500	0.0442		mg/Kg		88	70 - 130
1,2-Dichloropropane	0.0500	0.0438		mg/Kg		88	70 - 125
2-Butanone (MEK)	0.0500	0.0413		mg/Kg		83	47 - 138
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0403		mg/Kg		81	50 - 148
Acetone	0.0500	0.0472		mg/Kg		94	40 - 150
Benzene	0.0500	0.0462		mg/Kg		92	70 - 125
Bromodichloromethane	0.0500	0.0428		mg/Kg		86	67 - 129
Bromoform	0.0500	0.0383		mg/Kg		77	68 - 136
Bromomethane	0.0500	0.0449		mg/Kg		90	70 - 130
Carbon disulfide	0.0500	0.0455		mg/Kg		91	70 - 129
Carbon tetrachloride	0.0500	0.0475		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0476		mg/Kg		95	50 - 150
Chloroethane	0.0500	0.0465		mg/Kg		93	75 - 125
Chloroform	0.0500	0.0459		mg/Kg		92	57 - 135
Chloromethane	0.0500	0.0422		mg/Kg		84	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0465		mg/Kg		93	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0444		mg/Kg		89	70 - 125
Dibromochloromethane	0.0500	0.0409		mg/Kg		82	69 - 125
Ethylbenzene	0.0500	0.0473		mg/Kg		95	61 - 136
Methyl tert-butyl ether	0.0500	0.0446		mg/Kg		89	50 - 140
Methylene Chloride	0.0500	0.0450		mg/Kg		90	70 - 126
Styrene	0.0500	0.0450		mg/Kg		90	70 - 125
Tetrachloroethene	0.0500	0.0479		mg/Kg		96	70 - 124
Toluene	0.0500	0.0475		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0432		mg/Kg		86	70 - 125
Trichloroethene	0.0500	0.0470		mg/Kg		94	70 - 125
Vinyl acetate	0.0500	0.0366		mg/Kg		73	40 - 153
Vinyl chloride	0.0500	0.0445		mg/Kg		89	70 - 125
Xylenes, Total	0.100	0.0947		mg/Kg		95	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	89		75 - 126
Toluene-d8 (Surr)	97		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-518336/5

Matrix: Solid

Analysis Batch: 518336

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0460		mg/Kg		92	70 - 128	2	30
1,1,2,2-Tetrachloroethane	0.0500	0.0420		mg/Kg		84	70 - 122	2	30
1,1,2-Trichloroethane	0.0500	0.0429		mg/Kg		86	70 - 125	0	30
1,1-Dichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125	2	30
1,1-Dichloroethene	0.0500	0.0469		mg/Kg		94	70 - 120	2	30
1,2-Dichloroethane	0.0500	0.0443		mg/Kg		89	70 - 130	0	30
1,2-Dichloropropane	0.0500	0.0435		mg/Kg		87	70 - 125	1	30
2-Butanone (MEK)	0.0500	0.0440		mg/Kg		88	47 - 138	6	30
2-Hexanone	0.0500	0.0441		mg/Kg		88	48 - 146	7	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0433		mg/Kg		87	50 - 148	7	30
Acetone	0.0500	0.0509		mg/Kg		102	40 - 150	8	30
Benzene	0.0500	0.0453		mg/Kg		91	70 - 125	2	30
Bromodichloromethane	0.0500	0.0426		mg/Kg		85	67 - 129	1	30
Bromoform	0.0500	0.0393		mg/Kg		79	68 - 136	3	30
Bromomethane	0.0500	0.0488		mg/Kg		98	70 - 130	8	30
Carbon disulfide	0.0500	0.0445		mg/Kg		89	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0461		mg/Kg		92	75 - 125	3	30
Chlorobenzene	0.0500	0.0466		mg/Kg		93	50 - 150	2	30
Chloroethane	0.0500	0.0513		mg/Kg		103	75 - 125	10	30
Chloroform	0.0500	0.0447		mg/Kg		89	57 - 135	2	30
Chloromethane	0.0500	0.0465		mg/Kg		93	70 - 125	10	30
cis-1,2-Dichloroethene	0.0500	0.0454		mg/Kg		91	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0439		mg/Kg		88	70 - 125	1	30
Dibromochloromethane	0.0500	0.0418		mg/Kg		84	69 - 125	2	30
Ethylbenzene	0.0500	0.0460		mg/Kg		92	61 - 136	3	30
Methyl tert-butyl ether	0.0500	0.0451		mg/Kg		90	50 - 140	1	30
Methylene Chloride	0.0500	0.0443		mg/Kg		89	70 - 126	2	30
Styrene	0.0500	0.0449		mg/Kg		90	70 - 125	0	30
Tetrachloroethene	0.0500	0.0468		mg/Kg		94	70 - 124	2	30
Toluene	0.0500	0.0464		mg/Kg		93	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0460		mg/Kg		92	70 - 125	2	30
trans-1,3-Dichloropropene	0.0500	0.0430		mg/Kg		86	70 - 125	0	30
Trichloroethene	0.0500	0.0461		mg/Kg		92	70 - 125	2	30
Vinyl acetate	0.0500	0.0382		mg/Kg		76	40 - 153	4	30
Vinyl chloride	0.0500	0.0489		mg/Kg		98	70 - 125	9	30
Xylenes, Total	0.100	0.0940		mg/Kg		94	53 - 147	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	88		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518520/1-A

Matrix: Solid

Analysis Batch: 518553

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 518520

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/03/19 21:30	12/04/19 11:24	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518520/1-A
Matrix: Solid
Analysis Batch: 518553

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518520

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/03/19 21:30	12/04/19 11:24	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/03/19 21:30	12/04/19 11:24	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	138		31 - 166	12/03/19 21:30	12/04/19 11:24	1
Phenol-d5	128		30 - 153	12/03/19 21:30	12/04/19 11:24	1
Nitrobenzene-d5	108		37 - 147	12/03/19 21:30	12/04/19 11:24	1
2-Fluorobiphenyl	90		43 - 145	12/03/19 21:30	12/04/19 11:24	1
2,4,6-Tribromophenol	62		31 - 143	12/03/19 21:30	12/04/19 11:24	1
Terphenyl-d14	95		42 - 157	12/03/19 21:30	12/04/19 11:24	1

Lab Sample ID: LCS 500-518520/2-A
Matrix: Solid
Analysis Batch: 518553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-chloroethyl)ether	1.33	1.69	*	mg/Kg		126	55 - 111
1,3-Dichlorobenzene	1.33	1.40		mg/Kg		105	65 - 124
1,4-Dichlorobenzene	1.33	1.37		mg/Kg		103	61 - 110
1,2-Dichlorobenzene	1.33	1.40		mg/Kg		105	62 - 110
2-Methylphenol	1.33	1.69	*	mg/Kg		127	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	2.14	*	mg/Kg		160	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.79	*	mg/Kg		134	56 - 118
Hexachloroethane	1.33	1.55	*	mg/Kg		117	60 - 114
2-Chlorophenol	1.33	1.55	*	mg/Kg		116	64 - 110
Nitrobenzene	1.33	1.78	*	mg/Kg		133	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.73	*	mg/Kg		130	60 - 112
1,2,4-Trichlorobenzene	1.33	1.33		mg/Kg		100	66 - 117
Isophorone	1.33	1.75	*	mg/Kg		131	55 - 110
2,4-Dimethylphenol	1.33	1.44		mg/Kg		108	60 - 110
Hexachlorobutadiene	1.33	1.29		mg/Kg		97	56 - 120
Naphthalene	1.33	1.43		mg/Kg		108	63 - 110
2,4-Dichlorophenol	1.33	1.37		mg/Kg		103	58 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518520/2-A

Matrix: Solid

Analysis Batch: 518553

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 518520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.36		mg/Kg		102	30 - 150
2,4,6-Trichlorophenol	1.33	1.17		mg/Kg		88	57 - 120
2,4,5-Trichlorophenol	1.33	1.29		mg/Kg		97	50 - 120
Hexachlorocyclopentadiene	1.33	0.229	J	mg/Kg		17	10 - 133
2-Methylnaphthalene	1.33	1.40		mg/Kg		105	69 - 112
2-Nitroaniline	1.33	1.88	*	mg/Kg		141	57 - 124
2-Chloronaphthalene	1.33	1.43		mg/Kg		107	69 - 114
4-Chloro-3-methylphenol	1.33	1.53		mg/Kg		115	65 - 122
2,6-Dinitrotoluene	1.33	1.49		mg/Kg		111	70 - 123
2-Nitrophenol	1.33	1.43		mg/Kg		107	60 - 120
3-Nitroaniline	1.33	1.35		mg/Kg		101	40 - 122
Dimethyl phthalate	1.33	1.44		mg/Kg		108	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		1	10 - 100
Acenaphthylene	1.33	1.46		mg/Kg		110	68 - 120
2,4-Dinitrotoluene	1.33	1.56		mg/Kg		117	69 - 124
Acenaphthene	1.33	1.43		mg/Kg		107	65 - 124
Dibenzofuran	1.33	1.45		mg/Kg		109	66 - 115
4-Nitrophenol	2.67	2.28		mg/Kg		86	30 - 122
Fluorene	1.33	1.44		mg/Kg		108	62 - 120
4-Nitroaniline	1.33	1.32		mg/Kg		99	60 - 160
4-Bromophenyl phenyl ether	1.33	1.31		mg/Kg		98	68 - 118
Hexachlorobenzene	1.33	1.33		mg/Kg		100	63 - 124
Diethyl phthalate	1.33	1.47		mg/Kg		110	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.33		mg/Kg		100	62 - 119
Pentachlorophenol	2.67	0.878		mg/Kg		33	13 - 112
N-Nitrosodiphenylamine	1.33	1.45		mg/Kg		109	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.329	J	mg/Kg		12	10 - 110
Phenanthrene	1.33	1.43		mg/Kg		108	62 - 120
Anthracene	1.33	1.45		mg/Kg		109	70 - 114
Carbazole	1.33	1.53		mg/Kg		115	65 - 142
Di-n-butyl phthalate	1.33	1.59		mg/Kg		120	65 - 120
Fluoranthene	1.33	1.40		mg/Kg		105	62 - 120
Pyrene	1.33	1.54		mg/Kg		116	61 - 128
Butyl benzyl phthalate	1.33	1.70		mg/Kg		127	71 - 129
Benzo[a]anthracene	1.33	1.35		mg/Kg		101	67 - 122
Chrysene	1.33	1.36		mg/Kg		102	63 - 120
3,3'-Dichlorobenzidine	1.33	1.10		mg/Kg		83	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.71		mg/Kg		128	72 - 131
Di-n-octyl phthalate	1.33	1.56		mg/Kg		117	68 - 134
Benzo[b]fluoranthene	1.33	1.38		mg/Kg		104	69 - 129
Benzo[k]fluoranthene	1.33	1.37		mg/Kg		103	68 - 127
Benzo[a]pyrene	1.33	1.47		mg/Kg		110	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.35		mg/Kg		102	68 - 130
Dibenz(a,h)anthracene	1.33	1.32		mg/Kg		99	64 - 131
Benzo[g,h,i]perylene	1.33	1.41		mg/Kg		106	72 - 131
3 & 4 Methylphenol	1.33	1.58		mg/Kg		118	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518520/2-A
Matrix: Solid
Analysis Batch: 518553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518520

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	141		31 - 166
Phenol-d5	140		30 - 153
Nitrobenzene-d5	113		37 - 147
2-Fluorobiphenyl	100		43 - 145
2,4,6-Tribromophenol	81		31 - 143
Terphenyl-d14	97		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-518491/2-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518491

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Manganese	0.500	0.477		mg/L		95		80 - 120

Lab Sample ID: LCS 500-518493/2-A
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Barium	0.500	0.488	J	mg/L		98		80 - 120
Beryllium	0.0500	0.0490		mg/L		98		80 - 120
Boron	1.00	0.893		mg/L		89		80 - 120
Cadmium	0.0500	0.0470		mg/L		94		80 - 120
Chromium	0.200	0.190		mg/L		95		80 - 120
Cobalt	0.500	0.470		mg/L		94		80 - 120
Iron	1.00	0.936		mg/L		94		80 - 120
Lead	0.100	0.131	*	mg/L		131		80 - 120
Manganese	0.500	0.493		mg/L		99		80 - 120
Nickel	0.500	0.472		mg/L		94		80 - 120
Selenium	0.100	0.0935		mg/L		94		80 - 120
Silver	0.0500	0.0466		mg/L		93		80 - 120
Zinc	0.500	0.459	J	mg/L		92		80 - 120

Lab Sample ID: MB 500-518510/1-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518510

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.410	J	2.0	0.39	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Barium	<1.0		1.0	0.11	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Boron	0.514	J	5.0	0.47	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Cadmium	0.0403	J	0.20	0.036	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Calcium	10.5	J	20	3.4	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Chromium	0.555	J	1.0	0.50	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/03/19 17:54	12/04/19 16:53	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-518510/1-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<1.0		1.0	0.28	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Iron	<20		20	10	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Lead	<0.50		0.50	0.23	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Magnesium	5.01	J	10	5.0	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Potassium	<50		50	18	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Silver	<0.50		0.50	0.13	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Sodium	<100		100	15	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/03/19 17:54	12/04/19 16:53	1

Lab Sample ID: LCS 500-518510/2-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	47.9		mg/Kg		96	80 - 120
Arsenic	10.0	8.59		mg/Kg		86	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Beryllium	5.00	4.55		mg/Kg		91	80 - 120
Boron	100	85.2		mg/Kg		85	80 - 120
Cadmium	5.00	4.44		mg/Kg		89	80 - 120
Calcium	1000	917		mg/Kg		92	80 - 120
Chromium	20.0	18.7		mg/Kg		94	80 - 120
Cobalt	50.0	47.5		mg/Kg		95	80 - 120
Copper	25.0	24.1		mg/Kg		96	80 - 120
Iron	100	95.5		mg/Kg		95	80 - 120
Lead	10.0	8.90		mg/Kg		89	80 - 120
Magnesium	1000	915		mg/Kg		92	80 - 120
Manganese	50.0	46.6		mg/Kg		93	80 - 120
Nickel	50.0	47.7		mg/Kg		95	80 - 120
Potassium	1000	993		mg/Kg		99	80 - 120
Selenium	10.0	8.11		mg/Kg		81	80 - 120
Silver	5.00	4.38		mg/Kg		88	80 - 120
Sodium	1000	985		mg/Kg		99	80 - 120
Thallium	10.0	8.91		mg/Kg		89	80 - 120
Vanadium	50.0	47.5		mg/Kg		95	80 - 120
Zinc	50.0	45.5		mg/Kg		91	80 - 120

Lab Sample ID: LB 500-517877/1-C
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518493

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 15:24	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-517877/1-C
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518493

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.50		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 15:24	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 15:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 15:24	1
Manganese	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 15:24	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Zinc	0.0439	J	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 15:24	1

Lab Sample ID: LB 500-517874/1-B
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 518491

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 21:22	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-518493/2-A
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.507		mg/L		101	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LB 500-517877/1-C
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518493

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/04/19 23:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/04/19 23:12	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-518400/12-A
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 07:54	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-518400/13-A
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518400
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00218		mg/L		109	80 - 120

Lab Sample ID: LCSD 500-518400/37-A
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 518400
%Rec.

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.00200	0.00210		mg/L		105	80 - 120	3	20

Lab Sample ID: LB 500-517877/1-B
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518400

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 07:57	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-518206/12-A
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/02/19 15:05	12/03/19 09:45	1

Lab Sample ID: LCS 500-518206/13-A
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518206
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.137		mg/Kg		82	80 - 120

Method: 9045D - pH

Lab Sample ID: 500-173939-1 DU
Matrix: Solid
Analysis Batch: 517162

Client Sample ID: 2615V2-AI-B28 (0-5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.7		8.6		SU		0.1	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Date Collected: 11/21/19 12:35

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 21:30	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 15:33	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:20	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 07:59	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 12:28		
					(End)	11/25/19 11:38		
Total/NA	Analysis	Moisture		1	517182	11/25/19 10:03	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B28 (0-5)

Lab Sample ID: 500-173939-1

Date Collected: 11/21/19 12:35

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518045	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 12:44	PMF	TAL CHI
Total/NA	Prep	3541			518520	12/03/19 21:30	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/06/19 00:54	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 17:41	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:29	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:23	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 21:34	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 15:38	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:24	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:01	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517162		JJB	TAL CHI
					(Start)	11/25/19 12:28		
					(End)	11/25/19 11:38		
Total/NA	Analysis	Moisture		1	517343	11/26/19 08:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B28 (5-10)

Lab Sample ID: 500-173939-2

Date Collected: 11/21/19 12:40

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518045	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 13:09	PMF	TAL CHI
Total/NA	Prep	3541			518520	12/03/19 21:30	JP1	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/06/19 01:17	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 17:53	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:33	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:25	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 21:38	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 15:42	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:27	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:02	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517182	11/25/19 10:03	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B28 (10-15)

Lab Sample ID: 500-173939-3

Date Collected: 11/21/19 12:50

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518045	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 13:35	PMF	TAL CHI
Total/NA	Prep	3541			518520	12/03/19 21:30	JP1	TAL CHI
Total/NA	Analysis	8270D		1	519122	12/06/19 13:17	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 17:57	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:37	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:28	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173939-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.



500-173939 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173939
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 4.8503

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Parameter					Comments
			Date	Time			VOC	SVOC	Total/TCCLP Metals	pH	Percent Solids	
1		2615V2-AI-B28(0-5)	11/21/19	1235	5	5	X	X	X	X	X	
2		2615V2-AI-B28(5-10)	11/21/19	1240	5	5	X	X	X	X	X	
3		2615V2-AI-B28(10-15)	11/21/19	1250	5	5	X	X	X	X	X	

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>J. Hughes</u>	Company <u>EVE</u>	Date <u>11/21/19</u>	Time <u>1450</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11/21/19</u>	Time <u>1450</u>
Relinquished By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11/21/19</u>	Time <u>1600</u>	Received By <u>Shirley Scott</u>	Company <u>TA-CRT</u>	Date <u>11/21/19</u>	Time <u>1600</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped: _____
Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173939-1

Login Number: 173939

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8,5.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-150990-1
Client Project/Site: IDOT - 176-001-WO043A

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
9/18/2018 2:36:42 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Job ID: 500-150990-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-150990-1

Receipt

The samples were received on 9/5/2018 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.2° C, 5.3° C and 5.4° C.

GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with 449663: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 449663 recovered outside control limits for the following analytes: Chloroethane.

Method(s) 8260B: The LCSD was analyzed 7 minutes outside the method specified 12 hour tune time.

2615V-118-B31 (6-12) (500-150990-4), 2615V-118-B28 (0-5) (500-150990-5), 2615V-118-B28 (5-10) (500-150990-6), 2615V-118-B28 (10-15) (500-150990-7), 2615V-118-B28 (15-23) (500-150990-8), 2615V-118-B28 (23-31) (500-150990-9), 2615V-118-B28 (31-39) (500-150990-10), 2615V-118-B07 (0-5) (500-150990-12), 2615V-118-B07 (5-10) (500-150990-13), 2615V-118-B07 (5-10)D (500-150990-14), 2615V-118-B07 (10-15) (500-150990-15), 2615V-118-B07 (15-23) (500-150990-16), 2615V-118-B07 (23-31) (500-150990-17), 2615V-118-B07 (31-39) (500-150990-18), 2615V-118-B07 (39-47) (500-150990-19), 2615V-118-B06 (0-5) (500-150990-20) and 2615V-118-B06 (5-10) (500-150990-21)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-449399 had 1 analyte outside control limits: 2,4-Dinitrophenol. These results have been reported and qualified. (LCS 500-449399/2-A)

Method(s) 8270D: Two acid surrogate recoveries for the following sample were outside the upper control limit: 2615V-118-B31 (6-12) (500-150990-4). This sample did not contain any acidic target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: The following samples contained one acid surrogate outside acceptance limits: 2615V-118-B39 (0-3) (500-150990-2), 2615V-118-B28 (0-5) (500-150990-5) and 2615V-118-B06 (0-5) (500-150990-20). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-449570 and analytical batch 500-450107 were outside control limits. There were 4 analytes that were at 0% recovery: 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Hexachlorocyclopentadiene and Pentachlorophenol. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The interference check standard solution (ICSA) associated with Analytical batch 500-449561 had results for Cobalt above the reporting limit (RL). Associated samples 2615V-118-B28 (0-5) (500-150990-5), 2615V-118-B28 (5-10) (500-150990-6), 2615V-118-B28 (10-15) (500-150990-7), 2615V-118-B28 (15-23) (500-150990-8), 2615V-118-B28 (23-31) (500-150990-9), 2615V-118-B28 (31-39) (500-150990-10), 2615V-118-B28 (39-47) (500-150990-11), 2615V-118-B07 (10-15) (500-150990-15), 2615V-118-B07 (15-23) (500-150990-16), 2615V-118-B07 (23-31) (500-150990-17) and 2615V-118-B07 (31-39) (500-150990-18) were less than the reporting limit for Cobalt, therefore the data has been reported.

Method(s) 6010B: The method blank for preparation batch 500-449058 and analytical batch 500-449628 contained Copper reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Job ID: 500-150990-1 (Continued)

Laboratory: TestAmerica Chicago (Continued)

method blank.

Method(s) 6010B: The method blank for preparation batch 500-449058 and analytical batch 500-449628 contained Copper and Zinc reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010B: The method blank for preparation batch 500-449069 and analytical batch 500-449629 contained Zinc above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010B: The method blank for preparation batch 500-449069 and analytical batch 500-449791 contained copper above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.015	J	0.038	0.0059	mg/Kg	1	☼	☼	8270D	Total/NA
2-Methylnaphthalene	0.019	J	0.077	0.0070	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthylene	0.018	J	0.038	0.0050	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthene	0.021	J	0.038	0.0069	mg/Kg	1	☼	☼	8270D	Total/NA
Fluorene	0.045		0.038	0.0054	mg/Kg	1	☼	☼	8270D	Total/NA
Phenanthrene	0.36		0.038	0.0053	mg/Kg	1	☼	☼	8270D	Total/NA
Anthracene	0.070		0.038	0.0064	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.62		0.038	0.0071	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.50		0.038	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.24		0.038	0.0051	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.33		0.038	0.010	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.47		0.038	0.0082	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.18		0.038	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]pyrene	0.25		0.038	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.12		0.038	0.0099	mg/Kg	1	☼	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.034	J	0.038	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.10		0.038	0.012	mg/Kg	1	☼	☼	8270D	Total/NA
Antimony	0.31	J	1.1	0.21	mg/Kg	1	☼	☼	6010B	Total/NA
Arsenic	8.4		0.54	0.18	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	63		0.54	0.062	mg/Kg	1	☼	☼	6010B	Total/NA
Beryllium	0.73		0.22	0.051	mg/Kg	1	☼	☼	6010B	Total/NA
Boron	14		2.7	0.25	mg/Kg	1	☼	☼	6010B	Total/NA
Cadmium	0.43	B	0.11	0.019	mg/Kg	1	☼	☼	6010B	Total/NA
Calcium	40000	B	54	9.2	mg/Kg	5	☼	☼	6010B	Total/NA
Chromium	19		0.54	0.27	mg/Kg	1	☼	☼	6010B	Total/NA
Cobalt	14		0.27	0.071	mg/Kg	1	☼	☼	6010B	Total/NA
Copper	44	B	0.54	0.15	mg/Kg	1	☼	☼	6010B	Total/NA
Iron	20000		11	5.6	mg/Kg	1	☼	☼	6010B	Total/NA
Lead	100		0.27	0.12	mg/Kg	1	☼	☼	6010B	Total/NA
Magnesium	19000	B	5.4	2.7	mg/Kg	1	☼	☼	6010B	Total/NA
Manganese	320		0.54	0.078	mg/Kg	1	☼	☼	6010B	Total/NA
Nickel	34		0.54	0.16	mg/Kg	1	☼	☼	6010B	Total/NA
Potassium	2900		27	9.6	mg/Kg	1	☼	☼	6010B	Total/NA
Selenium	0.39	J	0.54	0.32	mg/Kg	1	☼	☼	6010B	Total/NA
Silver	0.25	J	0.27	0.070	mg/Kg	1	☼	☼	6010B	Total/NA
Sodium	190		54	8.0	mg/Kg	1	☼	☼	6010B	Total/NA
Thallium	0.31	J	0.54	0.27	mg/Kg	1	☼	☼	6010B	Total/NA
Vanadium	22		0.27	0.064	mg/Kg	1	☼	☼	6010B	Total/NA
Zinc	110	B	1.1	0.47	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1			6010B	TCLP
Cobalt	0.024	J	0.025	0.010	mg/L	1			6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1			6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6) (Continued)

Lab Sample ID: 500-150990-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.29	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.016	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.075		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.016	J	0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.015	J	0.038	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.043	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.012	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0070	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.011	J	0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.027	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.010	J	0.038	0.0084	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.4		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	50000	B	55	9.3	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	37	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Silver	0.072	J	0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.34	J	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	47	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.083		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.034	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.037		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (0-5)

Lab Sample ID: 500-150990-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.015	J	0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.032	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.025	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.049		0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.43		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.081		0.037	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.61		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.48		0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.22		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.30		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.40		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.14		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.23		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.095		0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.032	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.077		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.7		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.82		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	20		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	54	9.2	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	36	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	24		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	470		0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3600		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.17	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	240		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.65		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	61	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.078	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.086		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.089	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.054		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.030	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10) (Continued)

Lab Sample ID: 500-150990-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.020	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.025	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.30	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.1		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.85		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	22		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000	B	58	9.9	mg/Kg	5	☼	6010B	Total/NA
Chromium	18		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	29000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	640		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	0.23	J	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	340		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	54	B	1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.091	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.077		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.12	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.070		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.011	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.026	J	0.077	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0070	J	0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.024	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.74		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000	B	57	9.6	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)D (Continued)

Lab Sample ID: 500-150990-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	13		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	32	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.57	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	32		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3500		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.64		0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.19	J	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	340		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	52	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.029		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.23	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.082		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.080	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.059		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.015	J	0.038	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.047	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0092	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0075	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.027	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	10		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.81		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000	B	59	10	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	33	B	0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	24000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (10-15) (Continued)

Lab Sample ID: 500-150990-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	360		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.48	J	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	58	B	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.077	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.051		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.21	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.046		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.012	J	0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.039	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0089	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0080	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0083	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.27	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.4		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.81		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	23		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	60	10	mg/Kg	5	☼	6010B	Total/NA
Chromium	19		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	30	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.60	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		30	11	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	240		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.50	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	55	B	1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.088	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (15-23) (Continued)

Lab Sample ID: 500-150990-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.023	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0064	mg/Kg	1	*	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0074	J	0.041	0.0063	mg/Kg	1	*	8270D	Total/NA
2-Methylnaphthalene	0.020	J	0.083	0.0075	mg/Kg	1	*	8270D	Total/NA
Fluorene	0.0062	J	0.041	0.0058	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.072		0.041	0.0057	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.017	J	0.041	0.0081	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.016	J	0.041	0.011	mg/Kg	1	*	8270D	Total/NA
Arsenic	7.5		0.61	0.21	mg/Kg	1	*	6010B	Total/NA
Barium	44		0.61	0.069	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.81		0.24	0.057	mg/Kg	1	*	6010B	Total/NA
Boron	24		3.0	0.28	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.18	B	0.12	0.022	mg/Kg	1	*	6010B	Total/NA
Calcium	53000	B	61	10	mg/Kg	5	*	6010B	Total/NA
Chromium	19		0.61	0.30	mg/Kg	1	*	6010B	Total/NA
Cobalt	15		0.30	0.080	mg/Kg	1	*	6010B	Total/NA
Copper	33	B	0.61	0.17	mg/Kg	1	*	6010B	Total/NA
Iron	21000		12	6.3	mg/Kg	1	*	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	23000	B	6.1	3.0	mg/Kg	1	*	6010B	Total/NA
Manganese	330		0.61	0.088	mg/Kg	1	*	6010B	Total/NA
Nickel	36		0.61	0.18	mg/Kg	1	*	6010B	Total/NA
Potassium	4000		30	11	mg/Kg	1	*	6010B	Total/NA
Silver	0.17	J	0.30	0.079	mg/Kg	1	*	6010B	Total/NA
Sodium	220		61	9.0	mg/Kg	1	*	6010B	Total/NA
Thallium	0.46	J	0.61	0.30	mg/Kg	1	*	6010B	Total/NA
Vanadium	24		0.30	0.072	mg/Kg	1	*	6010B	Total/NA
Zinc	58	B	1.2	0.54	mg/Kg	1	*	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.019	0.0062	mg/Kg	1	*	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0099	J	0.017	0.0075	mg/Kg	1	*	8260B	Total/NA
Naphthalene	0.012	J	0.041	0.0063	mg/Kg	1	*	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (31-39) (Continued)

Lab Sample ID: 500-150990-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	0.042	J	0.083	0.0075	mg/Kg	1		☼	8270D	Total/NA
Acenaphthene	0.012	J	0.041	0.0074	mg/Kg	1		☼	8270D	Total/NA
Phenanthrene	0.12		0.041	0.0057	mg/Kg	1		☼	8270D	Total/NA
Pyrene	0.029	J	0.041	0.0081	mg/Kg	1		☼	8270D	Total/NA
Chrysene	0.025	J	0.041	0.011	mg/Kg	1		☼	8270D	Total/NA
Arsenic	7.3		0.58	0.20	mg/Kg	1		☼	6010B	Total/NA
Barium	48		0.58	0.067	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.87		0.23	0.055	mg/Kg	1		☼	6010B	Total/NA
Boron	24		2.9	0.27	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.021	mg/Kg	1		☼	6010B	Total/NA
Calcium	54000	B	58	9.9	mg/Kg	5		☼	6010B	Total/NA
Chromium	20		0.58	0.29	mg/Kg	1		☼	6010B	Total/NA
Cobalt	15		0.29	0.077	mg/Kg	1		☼	6010B	Total/NA
Copper	32	B	0.58	0.16	mg/Kg	1		☼	6010B	Total/NA
Iron	22000		12	6.1	mg/Kg	1		☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1		☼	6010B	Total/NA
Magnesium	23000	B	5.8	2.9	mg/Kg	1		☼	6010B	Total/NA
Manganese	340		0.58	0.085	mg/Kg	1		☼	6010B	Total/NA
Nickel	38		0.58	0.17	mg/Kg	1		☼	6010B	Total/NA
Potassium	4200		29	10	mg/Kg	1		☼	6010B	Total/NA
Silver	0.18	J	0.29	0.075	mg/Kg	1		☼	6010B	Total/NA
Sodium	240		58	8.7	mg/Kg	1		☼	6010B	Total/NA
Thallium	0.37	J	0.58	0.29	mg/Kg	1		☼	6010B	Total/NA
Vanadium	25		0.29	0.069	mg/Kg	1		☼	6010B	Total/NA
Zinc	57	B	1.2	0.51	mg/Kg	1		☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1			6010B	TCLP
Cobalt	0.014	J ^	0.025	0.010	mg/L	1			6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.029		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.051	J B	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.022		0.019	0.0062	mg/Kg	1		☼	7471B	Total/NA
pH	8.9		0.20	0.20	SU	1			9045D	Total/NA

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.0096	J	0.017	0.0074	mg/Kg	1		☼	8260B	Total/NA
2-Methylnaphthalene	0.016	J	0.080	0.0073	mg/Kg	1		☼	8270D	Total/NA
Acenaphthene	0.012	J	0.039	0.0071	mg/Kg	1		☼	8270D	Total/NA
Fluorene	0.0092	J	0.039	0.0056	mg/Kg	1		☼	8270D	Total/NA
Phenanthrene	0.20		0.039	0.0055	mg/Kg	1		☼	8270D	Total/NA
Pyrene	0.036	J	0.039	0.0079	mg/Kg	1		☼	8270D	Total/NA
Chrysene	0.038	J	0.039	0.011	mg/Kg	1		☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.039	0.013	mg/Kg	1		☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.22	mg/Kg	1		☼	6010B	Total/NA
Arsenic	13		0.57	0.19	mg/Kg	1		☼	6010B	Total/NA
Barium	26		0.57	0.064	mg/Kg	1		☼	6010B	Total/NA
Beryllium	0.55		0.23	0.053	mg/Kg	1		☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (39-47) (Continued)

Lab Sample ID: 500-150990-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Boron	14		2.8	0.26	mg/Kg	1		☼	6010B	Total/NA
Cadmium	0.20	B	0.11	0.020	mg/Kg	1		☼	6010B	Total/NA
Calcium	53000	B	57	9.6	mg/Kg	5		☼	6010B	Total/NA
Chromium	13		0.57	0.28	mg/Kg	1		☼	6010B	Total/NA
Cobalt	17		0.28	0.074	mg/Kg	1		☼	6010B	Total/NA
Copper	43	B	0.57	0.16	mg/Kg	1		☼	6010B	Total/NA
Iron	22000		11	5.9	mg/Kg	1		☼	6010B	Total/NA
Lead	21		0.28	0.13	mg/Kg	1		☼	6010B	Total/NA
Magnesium	26000	B	5.7	2.8	mg/Kg	1		☼	6010B	Total/NA
Manganese	380		0.57	0.082	mg/Kg	1		☼	6010B	Total/NA
Nickel	37		0.57	0.16	mg/Kg	1		☼	6010B	Total/NA
Potassium	2300		28	10	mg/Kg	1		☼	6010B	Total/NA
Selenium	0.40	J	0.57	0.33	mg/Kg	1		☼	6010B	Total/NA
Silver	0.23	J	0.28	0.073	mg/Kg	1		☼	6010B	Total/NA
Sodium	170		57	8.4	mg/Kg	1		☼	6010B	Total/NA
Thallium	1.2		0.57	0.28	mg/Kg	1		☼	6010B	Total/NA
Vanadium	17		0.28	0.067	mg/Kg	1		☼	6010B	Total/NA
Zinc	48	B	1.1	0.50	mg/Kg	1		☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1			6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1			6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.051		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.080	J B	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.25		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.028		0.019	0.0062	mg/Kg	1		☼	7471B	Total/NA
pH	6.7		0.20	0.20	SU	1			9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-150990-3	2615V-118-B31 (0-6)	Solid	09/05/18 10:20	09/05/18 16:15
500-150990-4	2615V-118-B31 (6-12)	Solid	09/05/18 10:30	09/05/18 16:15
500-150990-12	2615V-118-B07 (0-5)	Solid	09/05/18 11:05	09/05/18 16:15
500-150990-13	2615V-118-B07 (5-10)	Solid	09/05/18 11:20	09/05/18 16:15
500-150990-14	2615V-118-B07 (5-10)D	Solid	09/05/18 11:25	09/05/18 16:15
500-150990-15	2615V-118-B07 (10-15)	Solid	09/05/18 11:30	09/05/18 16:15
500-150990-16	2615V-118-B07 (15-23)	Solid	09/05/18 11:35	09/05/18 16:15
500-150990-17	2615V-118-B07 (23-31)	Solid	09/05/18 11:40	09/05/18 16:15
500-150990-18	2615V-118-B07 (31-39)	Solid	09/05/18 11:45	09/05/18 16:15
500-150990-19	2615V-118-B07 (39-47)	Solid	09/05/18 11:50	09/05/18 16:15

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Date Collected: 09/05/18 10:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,3-Dichloropropane, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	09/06/18 14:00	09/14/18 13:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		75 - 131	09/06/18 14:00	09/14/18 13:23	1
Dibromofluoromethane	101		75 - 126	09/06/18 14:00	09/14/18 13:23	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 134	09/06/18 14:00	09/14/18 13:23	1
Toluene-d8 (Surr)	105		75 - 124	09/06/18 14:00	09/14/18 13:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Date Collected: 09/05/18 10:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Naphthalene	0.015	J	0.038	0.0059	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2-Methylnaphthalene	0.019	J	0.077	0.0070	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Acenaphthylene	0.018	J	0.038	0.0050	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Acenaphthene	0.021	J	0.038	0.0069	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Fluorene	0.045		0.038	0.0054	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Phenanthrene	0.36		0.038	0.0053	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Anthracene	0.070		0.038	0.0064	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Fluoranthene	0.62		0.038	0.0071	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Pyrene	0.50		0.038	0.0076	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Benzo[a]anthracene	0.24		0.038	0.0051	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Date Collected: 09/05/18 10:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.33		0.038	0.010	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Benzo[b]fluoranthene	0.47		0.038	0.0082	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Benzo[k]fluoranthene	0.18		0.038	0.011	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Benzo[a]pyrene	0.25		0.038	0.0074	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Indeno[1,2,3-cd]pyrene	0.12		0.038	0.0099	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Dibenz(a,h)anthracene	0.034	J	0.038	0.0074	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
Benzo[g,h,i]perylene	0.10		0.038	0.012	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	09/13/18 07:21	09/18/18 01:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		46 - 133	09/13/18 07:21	09/18/18 01:20	1
Phenol-d5	92		46 - 125	09/13/18 07:21	09/18/18 01:20	1
Nitrobenzene-d5	90		41 - 120	09/13/18 07:21	09/18/18 01:20	1
2-Fluorobiphenyl	80		44 - 121	09/13/18 07:21	09/18/18 01:20	1
2,4,6-Tribromophenol	81		25 - 139	09/13/18 07:21	09/18/18 01:20	1
Terphenyl-d14	103		35 - 160	09/13/18 07:21	09/18/18 01:20	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	1.1	0.21	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Arsenic	8.4		0.54	0.18	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Barium	63		0.54	0.062	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Beryllium	0.73		0.22	0.051	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Boron	14		2.7	0.25	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Cadmium	0.43	B	0.11	0.019	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Calcium	40000	B	54	9.2	mg/Kg	☼	09/11/18 08:10	09/13/18 18:34	5
Chromium	19		0.54	0.27	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Cobalt	14		0.27	0.071	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Copper	44	B	0.54	0.15	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Iron	20000		11	5.6	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Lead	100		0.27	0.12	mg/Kg	☼	09/11/18 08:10	09/13/18 18:30	1
Magnesium	19000	B	5.4	2.7	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Manganese	320		0.54	0.078	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Nickel	34		0.54	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Potassium	2900		27	9.6	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Selenium	0.39	J	0.54	0.32	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Silver	0.25	J	0.27	0.070	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Sodium	190		54	8.0	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Thallium	0.31	J	0.54	0.27	mg/Kg	☼	09/11/18 08:10	09/13/18 18:30	1
Vanadium	22		0.27	0.064	mg/Kg	☼	09/11/18 08:10	09/12/18 21:30	1
Zinc	110	B	1.1	0.47	mg/Kg	☼	09/11/18 08:10	09/13/18 18:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.35	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 16:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 16:58	1
Boron	0.084	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 16:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Date Collected: 09/05/18 10:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Chromium	<0.025		0.025	0.010	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Cobalt	0.024	J	0.025	0.010	mg/L	-	09/11/18 09:45	09/13/18 11:28	1
Iron	<0.40		0.40	0.20	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Manganese	1.8		0.025	0.010	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Nickel	0.033		0.025	0.010	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Selenium	<0.050		0.050	0.020	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Silver	<0.025		0.025	0.010	mg/L	-	09/11/18 09:45	09/12/18 16:58	1
Zinc	0.29	J B	0.50	0.020	mg/L	-	09/11/18 09:45	09/12/18 16:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.016	J	0.025	0.010	mg/L	-	09/11/18 15:19	09/12/18 21:08	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	09/11/18 09:45	09/12/18 18:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	09/11/18 09:45	09/12/18 18:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	09/11/18 13:10	09/12/18 10:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.075		0.019	0.0064	mg/Kg	☼	09/12/18 16:50	09/13/18 13:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.20	0.20	SU	-		09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.016	J	0.017	0.0074	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Carbon disulfide	<0.0043		0.0043	0.00088	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		75 - 131	09/06/18 14:00	09/14/18 01:23	1
Dibromofluoromethane	111		75 - 126	09/06/18 14:00	09/14/18 01:23	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	09/06/18 14:00	09/14/18 01:23	1
Toluene-d8 (Surr)	102		75 - 124	09/06/18 14:00	09/14/18 01:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Naphthalene	0.015	J	0.038	0.0060	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2-Methylnaphthalene	0.043	J	0.078	0.0071	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Acenaphthene	0.012	J	0.038	0.0070	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Fluorene	0.0070	J	0.038	0.0054	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Phenanthrene	0.12		0.038	0.0054	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Fluoranthene	0.011	J	0.038	0.0072	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Pyrene	0.027	J	0.038	0.0077	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.038	0.011	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Benzo[b]fluoranthene	0.010	J	0.038	0.0084	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	09/13/18 07:21	09/16/18 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	139	X	46 - 133				09/13/18 07:21	09/16/18 19:11	1
Phenol-d5	127	X	46 - 125				09/13/18 07:21	09/16/18 19:11	1
Nitrobenzene-d5	106		41 - 120				09/13/18 07:21	09/16/18 19:11	1
2-Fluorobiphenyl	111		44 - 121				09/13/18 07:21	09/16/18 19:11	1
2,4,6-Tribromophenol	90		25 - 139				09/13/18 07:21	09/16/18 19:11	1
Terphenyl-d14	112		35 - 160				09/13/18 07:21	09/16/18 19:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Arsenic	8.4		0.55	0.19	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Barium	37		0.55	0.062	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Beryllium	0.75		0.22	0.051	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Boron	18		2.7	0.25	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Cadmium	0.17	B	0.11	0.020	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Calcium	50000	B	55	9.3	mg/Kg	☼	09/11/18 08:10	09/13/18 18:42	5
Chromium	17		0.55	0.27	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Cobalt	15		0.27	0.072	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Copper	37	B	0.55	0.15	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Iron	20000		11	5.7	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Lead	16		0.27	0.13	mg/Kg	☼	09/11/18 08:10	09/13/18 18:38	1
Magnesium	23000	B	5.5	2.7	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Manganese	330		0.55	0.079	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Nickel	37		0.55	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Potassium	3400		27	9.7	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Silver	0.072	J	0.27	0.071	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Sodium	230		55	8.1	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Thallium	0.34	J	0.55	0.27	mg/Kg	☼	09/11/18 08:10	09/13/18 18:38	1
Vanadium	20		0.27	0.065	mg/Kg	☼	09/11/18 08:10	09/12/18 21:34	1
Zinc	47	B	1.1	0.48	mg/Kg	☼	09/11/18 08:10	09/13/18 18:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 17:02	1
Boron	0.071	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:02	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 17:02	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:02	1
Cobalt	0.038		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:32	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 17:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 17:02	1
Manganese	1.8		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:02	1
Nickel	0.083		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:02	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 17:02	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:02	1
Zinc	0.034	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 17:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.037		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 21:12	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 18:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 18:57	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.018	0.0059	mg/Kg	☼	09/12/18 16:50	09/13/18 13:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (0-5)

Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 04:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	09/06/18 14:00	09/14/18 04:49	1
Dibromofluoromethane	111		75 - 126	09/06/18 14:00	09/14/18 04:49	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	09/06/18 14:00	09/14/18 04:49	1
Toluene-d8 (Surr)	99		75 - 124	09/06/18 14:00	09/14/18 04:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1

TestAmerica Chicago

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TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (0-5)

Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Naphthalene	0.015	J	0.037	0.0058	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2-Methylnaphthalene	0.032	J	0.076	0.0069	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Acenaphthene	0.025	J	0.037	0.0067	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Fluorene	0.049		0.037	0.0053	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Phenanthrene	0.43		0.037	0.0052	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Anthracene	0.081		0.037	0.0063	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Fluoranthene	0.61		0.037	0.0070	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Pyrene	0.48		0.037	0.0075	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Benzo[a]anthracene	0.22		0.037	0.0050	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1

TestAmerica Chicago

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Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.30		0.037	0.010	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Benzo[b]fluoranthene	0.40		0.037	0.0081	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Benzo[k]fluoranthene	0.14		0.037	0.011	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Benzo[a]pyrene	0.23		0.037	0.0073	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Indeno[1,2,3-cd]pyrene	0.095		0.037	0.0097	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Dibenz(a,h)anthracene	0.032	J	0.037	0.0072	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Benzo[g,h,i]perylene	0.077		0.037	0.012	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	09/13/18 07:21	09/18/18 02:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	109		46 - 133				09/13/18 07:21	09/18/18 02:17	1
Phenol-d5	95		46 - 125				09/13/18 07:21	09/18/18 02:17	1
Nitrobenzene-d5	98		41 - 120				09/13/18 07:21	09/18/18 02:17	1
2-Fluorobiphenyl	82		44 - 121				09/13/18 07:21	09/18/18 02:17	1
2,4,6-Tribromophenol	84		25 - 139				09/13/18 07:21	09/18/18 02:17	1
Terphenyl-d14	108		35 - 160				09/13/18 07:21	09/18/18 02:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Arsenic	8.7		0.54	0.19	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Barium	31		0.54	0.062	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Beryllium	0.82		0.22	0.051	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Boron	20		2.7	0.25	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Cadmium	0.20	B	0.11	0.020	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Calcium	54000	B	54	9.2	mg/Kg	☼	09/11/18 08:10	09/13/18 20:06	5
Chromium	17		0.54	0.27	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Cobalt	16		0.27	0.071	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Copper	36	B	0.54	0.15	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Iron	21000		11	5.7	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Lead	24		0.27	0.13	mg/Kg	☼	09/11/18 08:10	09/13/18 20:02	1
Magnesium	22000	B	5.4	2.7	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Manganese	470		0.54	0.079	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Nickel	39		0.54	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Potassium	3600		27	9.6	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Silver	0.17	J	0.27	0.070	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Sodium	240		54	8.0	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Thallium	0.65		0.54	0.27	mg/Kg	☼	09/11/18 08:10	09/13/18 20:02	1
Vanadium	22		0.27	0.064	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1
Zinc	61	B	1.1	0.48	mg/Kg	☼	09/11/18 08:10	09/12/18 22:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.078	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 17:44	1
Boron	0.082	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:44	1

TestAmerica Chicago

Client Sample Results

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Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

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Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 17:44	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:44	1
Cobalt	0.049		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:36	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 17:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 17:44	1
Manganese	1.9		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:44	1
Nickel	0.086		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:44	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 17:44	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:44	1
Zinc	0.089	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 17:44	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 21:53	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:34	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054		0.019	0.0062	mg/Kg	☼	09/12/18 16:50	09/13/18 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 05:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		75 - 131	09/06/18 14:00	09/14/18 05:15	1
Dibromofluoromethane	110		75 - 126	09/06/18 14:00	09/14/18 05:15	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	09/06/18 14:00	09/14/18 05:15	1
Toluene-d8 (Surr)	104		75 - 124	09/06/18 14:00	09/14/18 05:15	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2-Methylnaphthalene	0.030	J	0.079	0.0072	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Phenanthrene	0.11		0.039	0.0054	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Pyrene	0.020	J	0.039	0.0078	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.025	J	0.039	0.011	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	09/13/18 07:21	09/16/18 23:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	130		46 - 133				09/13/18 07:21	09/16/18 23:06	1
Phenol-d5	106		46 - 125				09/13/18 07:21	09/16/18 23:06	1
Nitrobenzene-d5	92		41 - 120				09/13/18 07:21	09/16/18 23:06	1
2-Fluorobiphenyl	103		44 - 121				09/13/18 07:21	09/16/18 23:06	1
2,4,6-Tribromophenol	74		25 - 139				09/13/18 07:21	09/16/18 23:06	1
Terphenyl-d14	104		35 - 160				09/13/18 07:21	09/16/18 23:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.2	0.23	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Arsenic	9.1		0.58	0.20	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Barium	34		0.58	0.066	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Beryllium	0.85		0.23	0.054	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Boron	22		2.9	0.27	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Cadmium	0.11	J B	0.12	0.021	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Calcium	56000	B	58	9.9	mg/Kg	☼	09/11/18 08:10	09/13/18 20:14	5
Chromium	18		0.58	0.29	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Cobalt	15		0.29	0.076	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Copper	31	B	0.58	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Iron	29000		12	6.1	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Lead	17		0.29	0.13	mg/Kg	☼	09/11/18 08:10	09/13/18 20:10	1
Magnesium	20000	B	5.8	2.9	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Manganese	640		0.58	0.084	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Nickel	38		0.58	0.17	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Potassium	3700		29	10	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Selenium	0.43	J	0.58	0.34	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Silver	0.23	J	0.29	0.075	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Sodium	340		58	8.6	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	09/11/18 08:10	09/13/18 20:10	1
Vanadium	25		0.29	0.069	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1
Zinc	54	B	1.2	0.51	mg/Kg	☼	09/11/18 08:10	09/12/18 22:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.12	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 17:48	1
Boron	0.091	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:48	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 17:48	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:48	1
Cobalt	0.037		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:41	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 17:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 17:48	1
Manganese	1.9		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:48	1
Nickel	0.077		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:48	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 17:48	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:48	1
Zinc	0.12	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 17:48	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.070		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 21:57	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0065	mg/Kg	☼	09/12/18 16:50	09/13/18 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 05:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 131	09/06/18 14:00	09/14/18 05:41	1
Dibromofluoromethane	112		75 - 126	09/06/18 14:00	09/14/18 05:41	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	09/06/18 14:00	09/14/18 05:41	1
Toluene-d8 (Surr)	100		75 - 124	09/06/18 14:00	09/14/18 05:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Naphthalene	0.011	J	0.038	0.0059	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2-Methylnaphthalene	0.026	J	0.077	0.0071	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Acenaphthene	0.0070	J	0.038	0.0069	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Phenanthrene	0.10		0.038	0.0053	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Pyrene	0.022	J	0.038	0.0076	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.024	J	0.038	0.010	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	09/13/18 07:21	09/16/18 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	109		46 - 133				09/13/18 07:21	09/16/18 23:32	1
Phenol-d5	51		46 - 125				09/13/18 07:21	09/16/18 23:32	1
Nitrobenzene-d5	94		41 - 120				09/13/18 07:21	09/16/18 23:32	1
2-Fluorobiphenyl	102		44 - 121				09/13/18 07:21	09/16/18 23:32	1
2,4,6-Tribromophenol	76		25 - 139				09/13/18 07:21	09/16/18 23:32	1
Terphenyl-d14	111		35 - 160				09/13/18 07:21	09/16/18 23:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.1	0.22	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Arsenic	8.1		0.57	0.19	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Barium	35		0.57	0.065	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Beryllium	0.74		0.23	0.053	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Boron	21		2.8	0.26	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Cadmium	0.18	B	0.11	0.020	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Calcium	59000	B	57	9.6	mg/Kg	☼	09/11/18 08:10	09/13/18 20:22	5
Chromium	17		0.57	0.28	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Cobalt	13		0.28	0.074	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Copper	32	B	0.57	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Iron	21000		11	5.9	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Lead	15		0.28	0.13	mg/Kg	☼	09/11/18 08:10	09/13/18 20:18	1
Magnesium	26000	B	5.7	2.8	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Manganese	340		0.57	0.082	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Nickel	32		0.57	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Potassium	3500		28	10	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Selenium	0.64		0.57	0.33	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Silver	0.19	J	0.28	0.073	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Sodium	340		57	8.4	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	09/11/18 08:10	09/13/18 20:18	1
Vanadium	22		0.28	0.067	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1
Zinc	52	B	1.1	0.50	mg/Kg	☼	09/11/18 08:10	09/12/18 22:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.14	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 17:52	1
Boron	0.083	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:52	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 17:52	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:52	1
Cobalt	0.029		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:45	1
Iron	0.23	J	0.40	0.20	mg/L		09/11/18 09:45	09/12/18 17:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 17:52	1
Manganese	1.8		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:52	1
Nickel	0.082		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:52	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 17:52	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:52	1
Zinc	0.080	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 17:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.059		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 22:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0062	mg/Kg	☼	09/12/18 16:50	09/13/18 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Date Collected: 09/05/18 11:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 06:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 131	09/06/18 14:00	09/14/18 06:06	1
Dibromofluoromethane	110		75 - 126	09/06/18 14:00	09/14/18 06:06	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	09/06/18 14:00	09/14/18 06:06	1
Toluene-d8 (Surr)	99		75 - 124	09/06/18 14:00	09/14/18 06:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Date Collected: 09/05/18 11:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Naphthalene	0.015	J	0.038	0.0060	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2-Methylnaphthalene	0.047	J	0.078	0.0071	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Acenaphthene	0.0092	J	0.038	0.0070	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Fluorene	0.0075	J	0.038	0.0054	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Phenanthrene	0.11		0.038	0.0054	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Pyrene	0.023	J	0.038	0.0077	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Date Collected: 09/05/18 11:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.027	J	0.038	0.011	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	09/13/18 07:21	09/16/18 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		46 - 133				09/13/18 07:21	09/16/18 23:58	1
Phenol-d5	94		46 - 125				09/13/18 07:21	09/16/18 23:58	1
Nitrobenzene-d5	85		41 - 120				09/13/18 07:21	09/16/18 23:58	1
2-Fluorobiphenyl	96		44 - 121				09/13/18 07:21	09/16/18 23:58	1
2,4,6-Tribromophenol	72		25 - 139				09/13/18 07:21	09/16/18 23:58	1
Terphenyl-d14	119		35 - 160				09/13/18 07:21	09/16/18 23:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Arsenic	10		0.59	0.20	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Barium	37		0.59	0.067	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Beryllium	0.81		0.24	0.055	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Boron	21		2.9	0.27	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Cadmium	0.17	B	0.12	0.021	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Calcium	56000	B	59	10	mg/Kg	☼	09/11/18 08:10	09/13/18 20:30	5
Chromium	17		0.59	0.29	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Cobalt	14		0.29	0.077	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Copper	33	B	0.59	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Iron	24000		12	6.1	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Lead	16		0.29	0.14	mg/Kg	☼	09/11/18 08:10	09/13/18 20:26	1
Magnesium	26000	B	5.9	2.9	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Manganese	370		0.59	0.085	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Nickel	36		0.59	0.17	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Potassium	3700		29	10	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Silver	0.15	J	0.29	0.076	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Sodium	360		59	8.7	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Thallium	0.48	J	0.59	0.29	mg/Kg	☼	09/11/18 08:10	09/13/18 20:26	1
Vanadium	22		0.29	0.069	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1
Zinc	58	B	1.2	0.52	mg/Kg	☼	09/11/18 08:10	09/12/18 22:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.36	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 17:56	1
Boron	0.077	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 17:56	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Date Collected: 09/05/18 11:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 17:56	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:56	1
Cobalt	0.023	J ^	0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:56	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 17:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 17:56	1
Manganese	2.1		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:56	1
Nickel	0.051		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:56	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 17:56	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 17:56	1
Zinc	0.21	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 17:56	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.046		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 22:06	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:46	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0062	mg/Kg	☼	09/12/18 16:50	09/13/18 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Date Collected: 09/05/18 11:35

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		75 - 131	09/06/18 14:00	09/14/18 06:32	1
Dibromofluoromethane	112		75 - 126	09/06/18 14:00	09/14/18 06:32	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	09/06/18 14:00	09/14/18 06:32	1
Toluene-d8 (Surr)	101		75 - 124	09/06/18 14:00	09/14/18 06:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Date Collected: 09/05/18 11:35

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Naphthalene	0.012	J	0.040	0.0062	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2-Methylnaphthalene	0.039	J	0.081	0.0074	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Acenaphthene	0.0089	J	0.040	0.0072	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Fluorene	0.0080	J	0.040	0.0056	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Phenanthrene	0.10		0.040	0.0056	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Fluoranthene	0.0083	J	0.040	0.0074	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Pyrene	0.023	J	0.040	0.0080	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Date Collected: 09/05/18 11:35

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.040	0.011	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	09/13/18 07:21	09/17/18 00:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	116		46 - 133				09/13/18 07:21	09/17/18 00:24	1
Phenol-d5	100		46 - 125				09/13/18 07:21	09/17/18 00:24	1
Nitrobenzene-d5	96		41 - 120				09/13/18 07:21	09/17/18 00:24	1
2-Fluorobiphenyl	104		44 - 121				09/13/18 07:21	09/17/18 00:24	1
2,4,6-Tribromophenol	67		25 - 139				09/13/18 07:21	09/17/18 00:24	1
Terphenyl-d14	121		35 - 160				09/13/18 07:21	09/17/18 00:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.2	0.23	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Arsenic	7.4		0.60	0.21	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Barium	44		0.60	0.069	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Beryllium	0.81		0.24	0.056	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Boron	23		3.0	0.28	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Cadmium	0.17	B	0.12	0.022	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Calcium	54000	B	60	10	mg/Kg	☼	09/11/18 08:10	09/13/18 20:46	5
Chromium	19		0.60	0.30	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Cobalt	15		0.30	0.079	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Copper	30	B	0.60	0.17	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Iron	21000		12	6.3	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Lead	14		0.30	0.14	mg/Kg	☼	09/11/18 08:10	09/13/18 20:42	1
Magnesium	23000	B	6.0	3.0	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Manganese	320		0.60	0.088	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Nickel	36		0.60	0.18	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Potassium	3800		30	11	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Selenium	<0.60		0.60	0.36	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Silver	0.12	J	0.30	0.078	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Sodium	240		60	8.9	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Thallium	0.50	J	0.60	0.30	mg/Kg	☼	09/11/18 08:10	09/13/18 20:42	1
Vanadium	24		0.30	0.071	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1
Zinc	55	B	1.2	0.53	mg/Kg	☼	09/11/18 08:10	09/12/18 22:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 18:00	1
Boron	0.088	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:00	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Date Collected: 09/05/18 11:35

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 18:00	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:00	1
Cobalt	0.016	J ^	0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:00	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 18:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 18:00	1
Manganese	1.9		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:00	1
Nickel	0.037		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:00	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 18:00	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:00	1
Zinc	0.16	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 18:00	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.023	J	0.025	0.010	mg/L		09/11/18 15:19	09/12/18 22:10	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.019	0.0064	mg/Kg	☼	09/12/18 16:50	09/13/18 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 06:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131	09/06/18 14:00	09/14/18 06:58	1
Dibromofluoromethane	112		75 - 126	09/06/18 14:00	09/14/18 06:58	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/06/18 14:00	09/14/18 06:58	1
Toluene-d8 (Surr)	100		75 - 124	09/06/18 14:00	09/14/18 06:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Naphthalene	0.0074	J	0.041	0.0063	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2-Methylnaphthalene	0.020	J	0.083	0.0075	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Fluorene	0.0062	J	0.041	0.0058	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Phenanthrene	0.072		0.041	0.0057	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Pyrene	0.017	J	0.041	0.0081	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.016	J	0.041	0.011	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	09/13/18 07:21	09/17/18 00:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		46 - 133				09/13/18 07:21	09/17/18 00:51	1
Phenol-d5	66		46 - 125				09/13/18 07:21	09/17/18 00:51	1
Nitrobenzene-d5	73		41 - 120				09/13/18 07:21	09/17/18 00:51	1
2-Fluorobiphenyl	81		44 - 121				09/13/18 07:21	09/17/18 00:51	1
2,4,6-Tribromophenol	47		25 - 139				09/13/18 07:21	09/17/18 00:51	1
Terphenyl-d14	103		35 - 160				09/13/18 07:21	09/17/18 00:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Arsenic	7.5		0.61	0.21	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Barium	44		0.61	0.069	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Beryllium	0.81		0.24	0.057	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Boron	24		3.0	0.28	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Cadmium	0.18	B	0.12	0.022	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Calcium	53000	B	61	10	mg/Kg	☼	09/11/18 08:10	09/13/18 20:54	5
Chromium	19		0.61	0.30	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Cobalt	15		0.30	0.080	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Copper	33	B	0.61	0.17	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Iron	21000		12	6.3	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Lead	14		0.30	0.14	mg/Kg	☼	09/11/18 08:10	09/13/18 20:50	1
Magnesium	23000	B	6.1	3.0	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Manganese	330		0.61	0.088	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Nickel	36		0.61	0.18	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Potassium	4000		30	11	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Selenium	<0.61		0.61	0.36	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Silver	0.17	J	0.30	0.079	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Sodium	220		61	9.0	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Thallium	0.46	J	0.61	0.30	mg/Kg	☼	09/11/18 08:10	09/13/18 20:50	1
Vanadium	24		0.30	0.072	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1
Zinc	58	B	1.2	0.54	mg/Kg	☼	09/11/18 08:10	09/12/18 22:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 18:04	1
Boron	0.10	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:04	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 18:04	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:04	1
Cobalt	0.016	J ^	0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:04	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 18:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 18:04	1
Manganese	1.9		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:04	1
Nickel	0.032		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:04	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 18:04	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:04	1
Zinc	0.16	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 18:04	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.15		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 22:14	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0062	mg/Kg	☼	09/12/18 16:50	09/13/18 14:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0099	J	0.017	0.0075	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 07:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	09/06/18 14:00	09/14/18 07:23	1
Dibromofluoromethane	113		75 - 126	09/06/18 14:00	09/14/18 07:23	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	09/06/18 14:00	09/14/18 07:23	1
Toluene-d8 (Surr)	101		75 - 124	09/06/18 14:00	09/14/18 07:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Naphthalene	0.012	J	0.041	0.0063	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2-Methylnaphthalene	0.042	J	0.083	0.0075	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Acenaphthene	0.012	J	0.041	0.0074	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Pyrene	0.029	J	0.041	0.0081	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.025	J	0.041	0.011	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	09/13/18 07:21	09/17/18 01:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	113		46 - 133				09/13/18 07:21	09/17/18 01:17	1
Phenol-d5	100		46 - 125				09/13/18 07:21	09/17/18 01:17	1
Nitrobenzene-d5	92		41 - 120				09/13/18 07:21	09/17/18 01:17	1
2-Fluorobiphenyl	99		44 - 121				09/13/18 07:21	09/17/18 01:17	1
2,4,6-Tribromophenol	69		25 - 139				09/13/18 07:21	09/17/18 01:17	1
Terphenyl-d14	125		35 - 160				09/13/18 07:21	09/17/18 01:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Arsenic	7.3		0.58	0.20	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Barium	48		0.58	0.067	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Beryllium	0.87		0.23	0.055	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Boron	24		2.9	0.27	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Cadmium	0.17	B	0.12	0.021	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Calcium	54000	B	58	9.9	mg/Kg	☼	09/11/18 08:10	09/13/18 21:02	5
Chromium	20		0.58	0.29	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Cobalt	15		0.29	0.077	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Copper	32	B	0.58	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Iron	22000		12	6.1	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Lead	15		0.29	0.14	mg/Kg	☼	09/11/18 08:10	09/13/18 20:58	1
Magnesium	23000	B	5.8	2.9	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Manganese	340		0.58	0.085	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Nickel	38		0.58	0.17	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Potassium	4200		29	10	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Silver	0.18	J	0.29	0.075	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Sodium	240		58	8.7	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Thallium	0.37	J	0.58	0.29	mg/Kg	☼	09/11/18 08:10	09/13/18 20:58	1
Vanadium	25		0.29	0.069	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1
Zinc	57	B	1.2	0.51	mg/Kg	☼	09/11/18 08:10	09/12/18 22:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 18:09	1
Boron	0.11	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:09	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 18:09	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:09	1
Cobalt	0.014	J ^	0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:09	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 18:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 18:09	1
Manganese	2.0		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:09	1
Nickel	0.029		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:09	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 18:09	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:09	1
Zinc	0.051	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 18:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.27		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 22:18	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 19:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 19:57	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0062	mg/Kg	☼	09/12/18 16:50	09/13/18 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.20	0.20	SU			09/12/18 16:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0096	J	0.017	0.0074	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,3-Dichloropropane, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	09/06/18 14:00	09/14/18 07:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	09/06/18 14:00	09/14/18 07:49	1
Dibromofluoromethane	111		75 - 126	09/06/18 14:00	09/14/18 07:49	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	09/06/18 14:00	09/14/18 07:49	1
Toluene-d8 (Surr)	99		75 - 124	09/06/18 14:00	09/14/18 07:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2-Methylnaphthalene	0.016	J	0.080	0.0073	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Acenaphthene	0.012	J	0.039	0.0071	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Fluorene	0.0092	J	0.039	0.0056	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Phenanthrene	0.20		0.039	0.0055	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Pyrene	0.036	J	0.039	0.0079	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.038	J	0.039	0.011	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
Benzo[g,h,i]perylene	0.013	J	0.039	0.013	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	09/13/18 07:21	09/17/18 01:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	107		46 - 133	09/13/18 07:21	09/17/18 01:43	1
Phenol-d5	94		46 - 125	09/13/18 07:21	09/17/18 01:43	1
Nitrobenzene-d5	94		41 - 120	09/13/18 07:21	09/17/18 01:43	1
2-Fluorobiphenyl	102		44 - 121	09/13/18 07:21	09/17/18 01:43	1
2,4,6-Tribromophenol	64		25 - 139	09/13/18 07:21	09/17/18 01:43	1
Terphenyl-d14	117		35 - 160	09/13/18 07:21	09/17/18 01:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.22	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Arsenic	13		0.57	0.19	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Barium	26		0.57	0.064	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Beryllium	0.55		0.23	0.053	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Boron	14		2.8	0.26	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Cadmium	0.20	B	0.11	0.020	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Calcium	53000	B	57	9.6	mg/Kg	☼	09/11/18 08:10	09/13/18 21:10	5
Chromium	13		0.57	0.28	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Cobalt	17		0.28	0.074	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Copper	43	B	0.57	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Iron	22000		11	5.9	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Lead	21		0.28	0.13	mg/Kg	☼	09/11/18 08:10	09/13/18 21:06	1
Magnesium	26000	B	5.7	2.8	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Manganese	380		0.57	0.082	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Nickel	37		0.57	0.16	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Potassium	2300		28	10	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Selenium	0.40	J	0.57	0.33	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Silver	0.23	J	0.28	0.073	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Sodium	170		57	8.4	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Thallium	1.2		0.57	0.28	mg/Kg	☼	09/11/18 08:10	09/13/18 21:06	1
Vanadium	17		0.28	0.067	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1
Zinc	48	B	1.1	0.50	mg/Kg	☼	09/11/18 08:10	09/12/18 22:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 18:21	1
Boron	0.11	J	0.50	0.050	mg/L		09/11/18 09:45	09/12/18 18:21	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 83.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 18:21	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:21	1
Cobalt	0.012	J	0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:57	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 18:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 18:21	1
Manganese	2.1		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:21	1
Nickel	0.051		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:57	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 18:21	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 18:21	1
Zinc	0.080	J B	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 18:21	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.25		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 22:31	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 20:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 20:08	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 10:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.019	0.0062	mg/Kg	☼	09/12/18 16:50	09/13/18 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.7		0.20	0.20	SU			09/12/18 16:50	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

GC/MS VOA

Prep Batch: 449397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	5035	
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	5035	
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	5035	
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	5035	
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	5035	
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	5035	
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	5035	
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	5035	
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	5035	
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	5035	
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	5035	
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	5035	
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	5035	
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	5035	
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	5035	
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	5035	
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	5035	
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	5035	
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	5035	
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	5035	
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	5035	

Analysis Batch: 449663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	8260B	449397
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	8260B	449397
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	8260B	449397
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	8260B	449397
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	8260B	449397
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	8260B	449397
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	8260B	449397
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	8260B	449397
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	8260B	449397
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	8260B	449397
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	8260B	449397
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	8260B	449397
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	8260B	449397
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	8260B	449397
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	8260B	449397
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	8260B	449397
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	8260B	449397
MB 500-449663/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-449663/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-449663/29	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 449814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	8260B	449397
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	8260B	449397
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	8260B	449397
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	8260B	449397

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

GC/MS VOA (Continued)

Analysis Batch: 449814 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-449814/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-449814/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-449814/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 449399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	3541	
MB 500-449399/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-449399/2-A	Lab Control Sample	Total/NA	Solid	3541	

Prep Batch: 449570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	3541	
500-150990-2 - DL	2615V-118-B39 (0-3)	Total/NA	Solid	3541	
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	3541	
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	3541	
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	3541	
500-150990-5 - DL	2615V-118-B28 (0-5)	Total/NA	Solid	3541	
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	3541	
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	3541	
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	3541	
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	3541	
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	3541	
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	3541	
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	3541	
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	3541	
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	3541	
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	3541	
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	3541	
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	3541	
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	3541	
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	3541	
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	3541	
500-150990-20 - DL	2615V-118-B06 (0-5)	Total/NA	Solid	3541	
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	3541	
MB 500-449570/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-449570/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-150990-1 MS	2615V-118-B38 (0-3)	Total/NA	Solid	3541	
500-150990-1 MSD	2615V-118-B38 (0-3)	Total/NA	Solid	3541	

Analysis Batch: 449590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-449399/1-A	Method Blank	Total/NA	Solid	8270D	449399
LCS 500-449399/2-A	Lab Control Sample	Total/NA	Solid	8270D	449399

Analysis Batch: 449830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	8270D	449399

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

GC/MS Semi VOA (Continued)

Analysis Batch: 450028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-449570/1-A	Method Blank	Total/NA	Solid	8270D	449570
LCS 500-449570/2-A	Lab Control Sample	Total/NA	Solid	8270D	449570

Analysis Batch: 450107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	8270D	449570
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	8270D	449570
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	8270D	449570
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	8270D	449570
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	8270D	449570
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	8270D	449570
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	8270D	449570
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	8270D	449570
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	8270D	449570
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	8270D	449570
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	8270D	449570
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	8270D	449570
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	8270D	449570
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	8270D	449570
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	8270D	449570
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	8270D	449570
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	8270D	449570
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	8270D	449570
500-150990-1 MS	2615V-118-B38 (0-3)	Total/NA	Solid	8270D	449570
500-150990-1 MSD	2615V-118-B38 (0-3)	Total/NA	Solid	8270D	449570

Analysis Batch: 450323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-2 - DL	2615V-118-B39 (0-3)	Total/NA	Solid	8270D	449570
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	8270D	449570
500-150990-5 - DL	2615V-118-B28 (0-5)	Total/NA	Solid	8270D	449570
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	8270D	449570
500-150990-20 - DL	2615V-118-B06 (0-5)	Total/NA	Solid	8270D	449570

Metals

Leach Batch: 449010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	SPLP East	Solid	1312	
500-150990-2	2615V-118-B39 (0-3)	SPLP East	Solid	1312	
500-150990-3	2615V-118-B31 (0-6)	SPLP East	Solid	1312	
500-150990-4	2615V-118-B31 (6-12)	SPLP East	Solid	1312	
500-150990-5	2615V-118-B28 (0-5)	SPLP East	Solid	1312	
500-150990-6	2615V-118-B28 (5-10)	SPLP East	Solid	1312	
500-150990-7	2615V-118-B28 (10-15)	SPLP East	Solid	1312	
500-150990-8	2615V-118-B28 (15-23)	SPLP East	Solid	1312	
500-150990-9	2615V-118-B28 (23-31)	SPLP East	Solid	1312	
500-150990-10	2615V-118-B28 (31-39)	SPLP East	Solid	1312	
500-150990-11	2615V-118-B28 (39-47)	SPLP East	Solid	1312	
500-150990-12	2615V-118-B07 (0-5)	SPLP East	Solid	1312	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Leach Batch: 449010 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-13	2615V-118-B07 (5-10)	SPLP East	Solid	1312	
500-150990-14	2615V-118-B07 (5-10)D	SPLP East	Solid	1312	
500-150990-15	2615V-118-B07 (10-15)	SPLP East	Solid	1312	
500-150990-16	2615V-118-B07 (15-23)	SPLP East	Solid	1312	
500-150990-17	2615V-118-B07 (23-31)	SPLP East	Solid	1312	
500-150990-18	2615V-118-B07 (31-39)	SPLP East	Solid	1312	
500-150990-19	2615V-118-B07 (39-47)	SPLP East	Solid	1312	
500-150990-20	2615V-118-B06 (0-5)	SPLP East	Solid	1312	
LB 500-449010/1-B	Method Blank	SPLP East	Solid	1312	
500-150990-20 MS	2615V-118-B06 (0-5)	SPLP East	Solid	1312	
500-150990-20 DU	2615V-118-B06 (0-5)	SPLP East	Solid	1312	

Leach Batch: 449012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	SPLP East	Solid	1312	
LB 500-449012/1-B	Method Blank	SPLP East	Solid	1312	
500-150990-21 MS	2615V-118-B06 (5-10)	SPLP East	Solid	1312	
500-150990-21 DU	2615V-118-B06 (5-10)	SPLP East	Solid	1312	

Leach Batch: 449021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	1311	
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	1311	
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	1311	
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	1311	
500-150990-5	2615V-118-B28 (0-5)	TCLP	Solid	1311	
500-150990-6	2615V-118-B28 (5-10)	TCLP	Solid	1311	
500-150990-7	2615V-118-B28 (10-15)	TCLP	Solid	1311	
500-150990-8	2615V-118-B28 (15-23)	TCLP	Solid	1311	
500-150990-9	2615V-118-B28 (23-31)	TCLP	Solid	1311	
500-150990-10	2615V-118-B28 (31-39)	TCLP	Solid	1311	
500-150990-11	2615V-118-B28 (39-47)	TCLP	Solid	1311	
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	1311	
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	1311	
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	1311	
500-150990-15	2615V-118-B07 (10-15)	TCLP	Solid	1311	
500-150990-16	2615V-118-B07 (15-23)	TCLP	Solid	1311	
500-150990-17	2615V-118-B07 (23-31)	TCLP	Solid	1311	
500-150990-18	2615V-118-B07 (31-39)	TCLP	Solid	1311	
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	1311	
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	1311	
LB 500-449021/1-B	Method Blank	TCLP	Solid	1311	
LB 500-449021/1-C	Method Blank	TCLP	Solid	1311	
500-150990-11 MS	2615V-118-B28 (39-47)	TCLP	Solid	1311	
500-150990-20 MS	2615V-118-B06 (0-5)	TCLP	Solid	1311	
500-150990-11 DU	2615V-118-B28 (39-47)	TCLP	Solid	1311	
500-150990-20 DU	2615V-118-B06 (0-5)	TCLP	Solid	1311	

Leach Batch: 449027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	TCLP	Solid	1311	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Leach Batch: 449027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-449027/1-C	Method Blank	TCLP	Solid	1311	
LB 500-449027/1-D	Method Blank	TCLP	Solid	1311	

Prep Batch: 449058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	3050B	
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	3050B	
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	3050B	
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	3050B	
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	3050B	
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	3050B	
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	3050B	
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	3050B	
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	3050B	
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	3050B	
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	3050B	
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	3050B	
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	3050B	
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	3050B	
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	3050B	
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	3050B	
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	3050B	
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	3050B	
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	3050B	
MB 500-449058/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-449058/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 449069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	3050B	
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	3050B	
MB 500-449069/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-449069/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 449161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	3010A	449021
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	3010A	449021
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	3010A	449021
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	3010A	449021
500-150990-5	2615V-118-B28 (0-5)	TCLP	Solid	3010A	449021
500-150990-6	2615V-118-B28 (5-10)	TCLP	Solid	3010A	449021
500-150990-7	2615V-118-B28 (10-15)	TCLP	Solid	3010A	449021
500-150990-8	2615V-118-B28 (15-23)	TCLP	Solid	3010A	449021
500-150990-9	2615V-118-B28 (23-31)	TCLP	Solid	3010A	449021
500-150990-10	2615V-118-B28 (31-39)	TCLP	Solid	3010A	449021
500-150990-11	2615V-118-B28 (39-47)	TCLP	Solid	3010A	449021
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	3010A	449021
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	3010A	449021
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	3010A	449021
500-150990-15	2615V-118-B07 (10-15)	TCLP	Solid	3010A	449021

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Prep Batch: 449161 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-16	2615V-118-B07 (15-23)	TCLP	Solid	3010A	449021
500-150990-17	2615V-118-B07 (23-31)	TCLP	Solid	3010A	449021
500-150990-18	2615V-118-B07 (31-39)	TCLP	Solid	3010A	449021
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	3010A	449021
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	3010A	449021
LB 500-449021/1-B	Method Blank	TCLP	Solid	3010A	449021
LCS 500-449161/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-150990-20 MS	2615V-118-B06 (0-5)	TCLP	Solid	3010A	449021
500-150990-20 DU	2615V-118-B06 (0-5)	TCLP	Solid	3010A	449021

Prep Batch: 449194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B38 (5-10)	TCLP	Solid	7470A	449027
LB 500-449027/1-C	Method Blank	TCLP	Solid	7470A	449027
MB 500-449194/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-449194/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 449199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	7470A	449021
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	7470A	449021
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	7470A	449021
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	7470A	449021
500-150990-5	2615V-118-B28 (0-5)	TCLP	Solid	7470A	449021
500-150990-6	2615V-118-B28 (5-10)	TCLP	Solid	7470A	449021
500-150990-7	2615V-118-B28 (10-15)	TCLP	Solid	7470A	449021
500-150990-8	2615V-118-B28 (15-23)	TCLP	Solid	7470A	449021
500-150990-9	2615V-118-B28 (23-31)	TCLP	Solid	7470A	449021
500-150990-10	2615V-118-B28 (31-39)	TCLP	Solid	7470A	449021
500-150990-11	2615V-118-B28 (39-47)	TCLP	Solid	7470A	449021
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	7470A	449021
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	7470A	449021
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	7470A	449021
500-150990-15	2615V-118-B07 (10-15)	TCLP	Solid	7470A	449021
500-150990-16	2615V-118-B07 (15-23)	TCLP	Solid	7470A	449021
500-150990-17	2615V-118-B07 (23-31)	TCLP	Solid	7470A	449021
500-150990-18	2615V-118-B07 (31-39)	TCLP	Solid	7470A	449021
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	7470A	449021
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	7470A	449021
LB 500-449021/1-C	Method Blank	TCLP	Solid	7470A	449021
MB 500-449199/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-449199/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-150990-11 MS	2615V-118-B28 (39-47)	TCLP	Solid	7470A	449021
500-150990-11 DU	2615V-118-B28 (39-47)	TCLP	Solid	7470A	449021

Prep Batch: 449238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	SPLP East	Solid	3010A	449010
500-150990-2	2615V-118-B39 (0-3)	SPLP East	Solid	3010A	449010
500-150990-3	2615V-118-B31 (0-6)	SPLP East	Solid	3010A	449010
500-150990-4	2615V-118-B31 (6-12)	SPLP East	Solid	3010A	449010

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Prep Batch: 449238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-5	2615V-118-B28 (0-5)	SPLP East	Solid	3010A	449010
500-150990-6	2615V-118-B28 (5-10)	SPLP East	Solid	3010A	449010
500-150990-7	2615V-118-B28 (10-15)	SPLP East	Solid	3010A	449010
500-150990-8	2615V-118-B28 (15-23)	SPLP East	Solid	3010A	449010
500-150990-9	2615V-118-B28 (23-31)	SPLP East	Solid	3010A	449010
500-150990-10	2615V-118-B28 (31-39)	SPLP East	Solid	3010A	449010
500-150990-11	2615V-118-B28 (39-47)	SPLP East	Solid	3010A	449010
500-150990-12	2615V-118-B07 (0-5)	SPLP East	Solid	3010A	449010
500-150990-13	2615V-118-B07 (5-10)	SPLP East	Solid	3010A	449010
500-150990-14	2615V-118-B07 (5-10)D	SPLP East	Solid	3010A	449010
500-150990-15	2615V-118-B07 (10-15)	SPLP East	Solid	3010A	449010
500-150990-16	2615V-118-B07 (15-23)	SPLP East	Solid	3010A	449010
500-150990-17	2615V-118-B07 (23-31)	SPLP East	Solid	3010A	449010
500-150990-18	2615V-118-B07 (31-39)	SPLP East	Solid	3010A	449010
500-150990-19	2615V-118-B07 (39-47)	SPLP East	Solid	3010A	449010
500-150990-20	2615V-118-B06 (0-5)	SPLP East	Solid	3010A	449010
LB 500-449010/1-B	Method Blank	SPLP East	Solid	3010A	449010
LCS 500-449238/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-150990-20 MS	2615V-118-B06 (0-5)	SPLP East	Solid	3010A	449010
500-150990-20 DU	2615V-118-B06 (0-5)	SPLP East	Solid	3010A	449010

Prep Batch: 449243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	SPLP East	Solid	3010A	449012
LB 500-449012/1-B	Method Blank	SPLP East	Solid	3010A	449012
LCS 500-449243/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-150990-21 MS	2615V-118-B06 (5-10)	SPLP East	Solid	3010A	449012
500-150990-21 DU	2615V-118-B06 (5-10)	SPLP East	Solid	3010A	449012

Prep Batch: 449246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	TCLP	Solid	3010A	449027
LB 500-449027/1-D	Method Blank	TCLP	Solid	3010A	449027
LCS 500-449246/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 449426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	7470A	449199
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	7470A	449199
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	7470A	449199
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	7470A	449199
500-150990-5	2615V-118-B28 (0-5)	TCLP	Solid	7470A	449199
500-150990-6	2615V-118-B28 (5-10)	TCLP	Solid	7470A	449199
500-150990-7	2615V-118-B28 (10-15)	TCLP	Solid	7470A	449199
500-150990-8	2615V-118-B28 (15-23)	TCLP	Solid	7470A	449199
500-150990-9	2615V-118-B28 (23-31)	TCLP	Solid	7470A	449199
500-150990-10	2615V-118-B28 (31-39)	TCLP	Solid	7470A	449199
500-150990-11	2615V-118-B28 (39-47)	TCLP	Solid	7470A	449199
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	7470A	449199
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	7470A	449199
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	7470A	449199

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Analysis Batch: 449426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-15	2615V-118-B07 (10-15)	TCLP	Solid	7470A	449199
500-150990-16	2615V-118-B07 (15-23)	TCLP	Solid	7470A	449199
500-150990-17	2615V-118-B07 (23-31)	TCLP	Solid	7470A	449199
500-150990-18	2615V-118-B07 (31-39)	TCLP	Solid	7470A	449199
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	7470A	449199
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	7470A	449199
500-150990-21	2615V-118-B06 (5-10)	TCLP	Solid	7470A	449194
LB 500-449021/1-C	Method Blank	TCLP	Solid	7470A	449199
LB 500-449027/1-C	Method Blank	TCLP	Solid	7470A	449194
MB 500-449194/12-A	Method Blank	Total/NA	Solid	7470A	449194
MB 500-449199/12-A	Method Blank	Total/NA	Solid	7470A	449199
LCS 500-449194/13-A	Lab Control Sample	Total/NA	Solid	7470A	449194
LCS 500-449199/13-A	Lab Control Sample	Total/NA	Solid	7470A	449199
500-150990-11 MS	2615V-118-B28 (39-47)	TCLP	Solid	7470A	449199
500-150990-11 DU	2615V-118-B28 (39-47)	TCLP	Solid	7470A	449199

Prep Batch: 449458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	7471B	
MB 500-449458/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-449458/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 449462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	7471B	
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	7471B	
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	7471B	
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	7471B	
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	7471B	
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	7471B	
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	7471B	
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	7471B	
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	7471B	
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	7471B	
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	7471B	
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	7471B	
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	7471B	
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	7471B	
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	7471B	
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	7471B	
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	7471B	
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	7471B	
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	7471B	
MB 500-449462/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-449462/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-150990-12 MS	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	
500-150990-12 MSD	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	
500-150990-12 DU	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Analysis Batch: 449561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	SPLP East	Solid	6010B	449238
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	6010B	449161
500-150990-2	2615V-118-B39 (0-3)	SPLP East	Solid	6010B	449238
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	6010B	449161
500-150990-3	2615V-118-B31 (0-6)	SPLP East	Solid	6010B	449238
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	6010B	449161
500-150990-4	2615V-118-B31 (6-12)	SPLP East	Solid	6010B	449238
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	6010B	449161
500-150990-5	2615V-118-B28 (0-5)	SPLP East	Solid	6010B	449238
500-150990-5	2615V-118-B28 (0-5)	TCLP	Solid	6010B	449161
500-150990-6	2615V-118-B28 (5-10)	SPLP East	Solid	6010B	449238
500-150990-6	2615V-118-B28 (5-10)	TCLP	Solid	6010B	449161
500-150990-7	2615V-118-B28 (10-15)	SPLP East	Solid	6010B	449238
500-150990-7	2615V-118-B28 (10-15)	TCLP	Solid	6010B	449161
500-150990-8	2615V-118-B28 (15-23)	SPLP East	Solid	6010B	449238
500-150990-8	2615V-118-B28 (15-23)	TCLP	Solid	6010B	449161
500-150990-9	2615V-118-B28 (23-31)	SPLP East	Solid	6010B	449238
500-150990-9	2615V-118-B28 (23-31)	TCLP	Solid	6010B	449161
500-150990-10	2615V-118-B28 (31-39)	SPLP East	Solid	6010B	449238
500-150990-10	2615V-118-B28 (31-39)	TCLP	Solid	6010B	449161
500-150990-11	2615V-118-B28 (39-47)	SPLP East	Solid	6010B	449238
500-150990-11	2615V-118-B28 (39-47)	TCLP	Solid	6010B	449161
500-150990-12	2615V-118-B07 (0-5)	SPLP East	Solid	6010B	449238
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	6010B	449161
500-150990-13	2615V-118-B07 (5-10)	SPLP East	Solid	6010B	449238
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	6010B	449161
500-150990-14	2615V-118-B07 (5-10)D	SPLP East	Solid	6010B	449238
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	6010B	449161
500-150990-15	2615V-118-B07 (10-15)	SPLP East	Solid	6010B	449238
500-150990-15	2615V-118-B07 (10-15)	TCLP	Solid	6010B	449161
500-150990-16	2615V-118-B07 (15-23)	SPLP East	Solid	6010B	449238
500-150990-16	2615V-118-B07 (15-23)	TCLP	Solid	6010B	449161
500-150990-17	2615V-118-B07 (23-31)	SPLP East	Solid	6010B	449238
500-150990-17	2615V-118-B07 (23-31)	TCLP	Solid	6010B	449161
500-150990-18	2615V-118-B07 (31-39)	SPLP East	Solid	6010B	449238
500-150990-18	2615V-118-B07 (31-39)	TCLP	Solid	6010B	449161
500-150990-19	2615V-118-B07 (39-47)	SPLP East	Solid	6010B	449238
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	6010B	449161
500-150990-20	2615V-118-B06 (0-5)	SPLP East	Solid	6010B	449238
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	6010B	449161
LB 500-449010/1-B	Method Blank	SPLP East	Solid	6010B	449238
LB 500-449021/1-B	Method Blank	TCLP	Solid	6010B	449161
LCS 500-449161/2-A	Lab Control Sample	Total/NA	Solid	6010B	449161
LCS 500-449238/2-A	Lab Control Sample	Total/NA	Solid	6010B	449238
500-150990-20 MS	2615V-118-B06 (0-5)	SPLP East	Solid	6010B	449238
500-150990-20 MS	2615V-118-B06 (0-5)	TCLP	Solid	6010B	449161
500-150990-20 DU	2615V-118-B06 (0-5)	SPLP East	Solid	6010B	449238
500-150990-20 DU	2615V-118-B06 (0-5)	TCLP	Solid	6010B	449161

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Analysis Batch: 449563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	SPLP East	Solid	6010B	449243
500-150990-21	2615V-118-B06 (5-10)	TCLP	Solid	6010B	449246
LB 500-449012/1-B	Method Blank	SPLP East	Solid	6010B	449243
LB 500-449027/1-D	Method Blank	TCLP	Solid	6010B	449246
LCS 500-449243/2-A	Lab Control Sample	Total/NA	Solid	6010B	449243
LCS 500-449246/2-A	Lab Control Sample	Total/NA	Solid	6010B	449246
500-150990-21 MS	2615V-118-B06 (5-10)	SPLP East	Solid	6010B	449243
500-150990-21 DU	2615V-118-B06 (5-10)	SPLP East	Solid	6010B	449243

Analysis Batch: 449617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	6020A	449161
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	6020A	449161
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	6020A	449161
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	6020A	449161
500-150990-5	2615V-118-B28 (0-5)	TCLP	Solid	6020A	449161
500-150990-6	2615V-118-B28 (5-10)	TCLP	Solid	6020A	449161
500-150990-7	2615V-118-B28 (10-15)	TCLP	Solid	6020A	449161
500-150990-8	2615V-118-B28 (15-23)	TCLP	Solid	6020A	449161
500-150990-9	2615V-118-B28 (23-31)	TCLP	Solid	6020A	449161
500-150990-10	2615V-118-B28 (31-39)	TCLP	Solid	6020A	449161
500-150990-11	2615V-118-B28 (39-47)	TCLP	Solid	6020A	449161
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	6020A	449161
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	6020A	449161
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	6020A	449161
500-150990-15	2615V-118-B07 (10-15)	TCLP	Solid	6020A	449161
500-150990-16	2615V-118-B07 (15-23)	TCLP	Solid	6020A	449161
500-150990-17	2615V-118-B07 (23-31)	TCLP	Solid	6020A	449161
500-150990-18	2615V-118-B07 (31-39)	TCLP	Solid	6020A	449161
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	6020A	449161
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	6020A	449161
LB 500-449021/1-B	Method Blank	TCLP	Solid	6020A	449161
LCS 500-449161/2-A	Lab Control Sample	Total/NA	Solid	6020A	449161
500-150990-20 MS	2615V-118-B06 (0-5)	TCLP	Solid	6020A	449161
500-150990-20 DU	2615V-118-B06 (0-5)	TCLP	Solid	6020A	449161

Analysis Batch: 449628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	6010B	449058
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	6010B	449058
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	6010B	449058
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	6010B	449058
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	6010B	449058
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	6010B	449058
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	6010B	449058
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	6010B	449058
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	6010B	449058
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	6010B	449058
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	6010B	449058
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	6010B	449058
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	6010B	449058

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Analysis Batch: 449628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	6010B	449058
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	6010B	449058
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	6010B	449058
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	6010B	449058
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	6010B	449058
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	6010B	449058
MB 500-449058/1-A	Method Blank	Total/NA	Solid	6010B	449058
LCS 500-449058/2-A	Lab Control Sample	Total/NA	Solid	6010B	449058

Analysis Batch: 449629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	6010B	449069
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	6010B	449069
MB 500-449069/1-A	Method Blank	Total/NA	Solid	6010B	449069
LCS 500-449069/2-A	Lab Control Sample	Total/NA	Solid	6010B	449069

Analysis Batch: 449650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-21	2615V-118-B06 (5-10)	TCLP	Solid	6020A	449246
LB 500-449027/1-D	Method Blank	TCLP	Solid	6020A	449246
LCS 500-449246/2-A	Lab Control Sample	Total/NA	Solid	6020A	449246

Analysis Batch: 449686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	TCLP	Solid	6010B	449161
500-150990-2	2615V-118-B39 (0-3)	TCLP	Solid	6010B	449161
500-150990-3	2615V-118-B31 (0-6)	TCLP	Solid	6010B	449161
500-150990-4	2615V-118-B31 (6-12)	TCLP	Solid	6010B	449161
500-150990-12	2615V-118-B07 (0-5)	TCLP	Solid	6010B	449161
500-150990-13	2615V-118-B07 (5-10)	TCLP	Solid	6010B	449161
500-150990-14	2615V-118-B07 (5-10)D	TCLP	Solid	6010B	449161
500-150990-19	2615V-118-B07 (39-47)	TCLP	Solid	6010B	449161
500-150990-20	2615V-118-B06 (0-5)	TCLP	Solid	6010B	449161
LB 500-449021/1-B	Method Blank	TCLP	Solid	6010B	449161
LCS 500-449161/2-A	Lab Control Sample	Total/NA	Solid	6010B	449161
500-150990-20 MS	2615V-118-B06 (0-5)	TCLP	Solid	6010B	449161
500-150990-20 DU	2615V-118-B06 (0-5)	TCLP	Solid	6010B	449161

Analysis Batch: 449699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	7471B	449458
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	7471B	449462
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	7471B	449462
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	7471B	449462
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	7471B	449462
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	7471B	449462
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	7471B	449462
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	7471B	449462
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	7471B	449462
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	7471B	449462
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	7471B	449462

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Analysis Batch: 449699 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	449462
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	7471B	449462
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	7471B	449462
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	7471B	449462
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	7471B	449462
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	7471B	449462
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	7471B	449462
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	7471B	449462
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	7471B	449462
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	7471B	449462
MB 500-449458/12-A	Method Blank	Total/NA	Solid	7471B	449458
MB 500-449462/12-A	Method Blank	Total/NA	Solid	7471B	449462
LCS 500-449458/13-A	Lab Control Sample	Total/NA	Solid	7471B	449458
LCS 500-449462/13-A	Lab Control Sample	Total/NA	Solid	7471B	449462
500-150990-12 MS	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	449462
500-150990-12 MSD	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	449462
500-150990-12 DU	2615V-118-B07 (0-5)	Total/NA	Solid	7471B	449462

Analysis Batch: 449781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	6010B	449058
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	6010B	449058
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	6010B	449058
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	6010B	449058
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	6010B	449058
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	6010B	449058
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	6010B	449058
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	6010B	449058
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	6010B	449058
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	6010B	449058
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	6010B	449058
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	6010B	449058
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	6010B	449058
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	6010B	449058
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	6010B	449058
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	6010B	449058
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	6010B	449058
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	6010B	449058
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	6010B	449058
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	6010B	449058
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	6010B	449058
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	6010B	449058
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	6010B	449058
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	6010B	449058
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	6010B	449058
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	6010B	449058
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	6010B	449058
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	6010B	449058
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	6010B	449058
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	6010B	449058
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	6010B	449058

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Metals (Continued)

Analysis Batch: 449781 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	6010B	449058
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	6010B	449058
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	6010B	449058
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	6010B	449058
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	6010B	449058
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	6010B	449058
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	6010B	449058
MB 500-449058/1-A	Method Blank	Total/NA	Solid	6010B	449058
LCS 500-449058/2-A	Lab Control Sample	Total/NA	Solid	6010B	449058

Analysis Batch: 449791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	6010B	449069
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	6010B	449069
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	6010B	449069
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	6010B	449069
MB 500-449069/1-A	Method Blank	Total/NA	Solid	6010B	449069
LCS 500-449069/2-A	Lab Control Sample	Total/NA	Solid	6010B	449069

General Chemistry

Analysis Batch: 449008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	Moisture	

Analysis Batch: 449023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	Moisture	
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	Moisture	
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	Moisture	
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	Moisture	
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	Moisture	
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	Moisture	
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	Moisture	
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	Moisture	
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	Moisture	
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	Moisture	
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	Moisture	
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	Moisture	
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	Moisture	
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	Moisture	
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	Moisture	
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	Moisture	
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	Moisture	
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	Moisture	
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	Moisture	
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	Moisture	
500-150990-6 DU	2615V-118-B28 (5-10)	Total/NA	Solid	Moisture	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

General Chemistry (Continued)

Analysis Batch: 449453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150990-1	2615V-118-B38 (0-3)	Total/NA	Solid	9045D	
500-150990-2	2615V-118-B39 (0-3)	Total/NA	Solid	9045D	
500-150990-3	2615V-118-B31 (0-6)	Total/NA	Solid	9045D	
500-150990-4	2615V-118-B31 (6-12)	Total/NA	Solid	9045D	
500-150990-5	2615V-118-B28 (0-5)	Total/NA	Solid	9045D	
500-150990-6	2615V-118-B28 (5-10)	Total/NA	Solid	9045D	
500-150990-7	2615V-118-B28 (10-15)	Total/NA	Solid	9045D	
500-150990-8	2615V-118-B28 (15-23)	Total/NA	Solid	9045D	
500-150990-9	2615V-118-B28 (23-31)	Total/NA	Solid	9045D	
500-150990-10	2615V-118-B28 (31-39)	Total/NA	Solid	9045D	
500-150990-11	2615V-118-B28 (39-47)	Total/NA	Solid	9045D	
500-150990-12	2615V-118-B07 (0-5)	Total/NA	Solid	9045D	
500-150990-13	2615V-118-B07 (5-10)	Total/NA	Solid	9045D	
500-150990-14	2615V-118-B07 (5-10)D	Total/NA	Solid	9045D	
500-150990-15	2615V-118-B07 (10-15)	Total/NA	Solid	9045D	
500-150990-16	2615V-118-B07 (15-23)	Total/NA	Solid	9045D	
500-150990-17	2615V-118-B07 (23-31)	Total/NA	Solid	9045D	
500-150990-18	2615V-118-B07 (31-39)	Total/NA	Solid	9045D	
500-150990-19	2615V-118-B07 (39-47)	Total/NA	Solid	9045D	
500-150990-20	2615V-118-B06 (0-5)	Total/NA	Solid	9045D	
500-150990-21	2615V-118-B06 (5-10)	Total/NA	Solid	9045D	
500-150990-9 DU	2615V-118-B28 (23-31)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(75-131)	(75-126)	(70-134)	(75-124)
500-150990-1	2615V-118-B38 (0-3)	124	100	109	107
500-150990-2	2615V-118-B39 (0-3)	129	101	110	105
500-150990-3	2615V-118-B31 (0-6)	117	101	110	105
500-150990-4	2615V-118-B31 (6-12)	119	111	100	102
500-150990-5	2615V-118-B28 (0-5)	104	108	96	100
500-150990-6	2615V-118-B28 (5-10)	116	110	98	105
500-150990-7	2615V-118-B28 (10-15)	102	110	98	99
500-150990-8	2615V-118-B28 (15-23)	103	112	98	101
500-150990-9	2615V-118-B28 (23-31)	104	110	98	101
500-150990-10	2615V-118-B28 (31-39)	100	110	99	100
500-150990-11	2615V-118-B28 (39-47)	112	99	109	104
500-150990-12	2615V-118-B07 (0-5)	103	111	99	99
500-150990-13	2615V-118-B07 (5-10)	112	110	97	104
500-150990-14	2615V-118-B07 (5-10)D	105	112	98	100
500-150990-15	2615V-118-B07 (10-15)	104	110	99	99
500-150990-16	2615V-118-B07 (15-23)	106	112	96	101
500-150990-17	2615V-118-B07 (23-31)	101	112	95	100
500-150990-18	2615V-118-B07 (31-39)	103	113	96	101
500-150990-19	2615V-118-B07 (39-47)	103	111	96	99
500-150990-20	2615V-118-B06 (0-5)	98	112	98	98
500-150990-21	2615V-118-B06 (5-10)	109	112	97	101
LCS 500-449663/4	Lab Control Sample	92	104	90	99
LCS 500-449814/3	Lab Control Sample	106	101	103	102
LCSD 500-449663/29	Lab Control Sample Dup	92	106	89	98
LCSD 500-449814/4	Lab Control Sample Dup	104	101	103	99
MB 500-449663/5	Method Blank	101	105	94	98
MB 500-449814/5	Method Blank	112	103	107	99

Surrogate Legend

- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane
- DCA = 1,2-Dichloroethane-d4 (Surr)
- TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPHL
		(46-133)	(46-125)	(41-120)	(44-121)	(25-139)	(35-160)
500-150990-1	2615V-118-B38 (0-3)	120	111	97	104	88	109
500-150990-1 MS	2615V-118-B38 (0-3)	115	66	92	99	58	123
500-150990-1 MSD	2615V-118-B38 (0-3)	116	114	94	105	70	130
500-150990-2	2615V-118-B39 (0-3)	108	98	90	99	78	91
500-150990-2 - DL	2615V-118-B39 (0-3)	147 X	81	80	81	71	81
500-150990-3	2615V-118-B31 (0-6)	110	92	90	80	81	103
500-150990-4	2615V-118-B31 (6-12)	139 X	127 X	106	111	90	112
500-150990-5	2615V-118-B28 (0-5)	126	117	103	110	83	110
500-150990-5 - DL	2615V-118-B28 (0-5)	167 X	101	92	89	78	98

TestAmerica Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (46-133)	PHL (46-125)	NBZ (41-120)	FBP (44-121)	TBP (25-139)	TPHL (35-160)
500-150990-6	2615V-118-B28 (5-10)	110	102	91	95	73	102
500-150990-7	2615V-118-B28 (10-15)	128	114	96	108	74	106
500-150990-8	2615V-118-B28 (15-23)	111	102	94	101	69	108
500-150990-9	2615V-118-B28 (23-31)	116	112	97	105	74	111
500-150990-10	2615V-118-B28 (31-39)	111	108	92	97	62	110
500-150990-11	2615V-118-B28 (39-47)	120	111	94	101	70	109
500-150990-12	2615V-118-B07 (0-5)	109	95	98	82	84	108
500-150990-13	2615V-118-B07 (5-10)	130	106	92	103	74	104
500-150990-14	2615V-118-B07 (5-10)D	109	51	94	102	76	111
500-150990-15	2615V-118-B07 (10-15)	101	94	85	96	72	119
500-150990-16	2615V-118-B07 (15-23)	116	100	96	104	67	121
500-150990-17	2615V-118-B07 (23-31)	84	66	73	81	47	103
500-150990-18	2615V-118-B07 (31-39)	113	100	92	99	69	125
500-150990-19	2615V-118-B07 (39-47)	107	94	94	102	64	117
500-150990-20	2615V-118-B06 (0-5)	109	109	95	108	63	121
500-150990-20 - DL	2615V-118-B06 (0-5)	165 X	95	97	92	76	101
500-150990-21	2615V-118-B06 (5-10)	92	89	98	104	69	95
LCS 500-449399/2-A	Lab Control Sample	106	101	87	90	85	89
LCS 500-449570/2-A	Lab Control Sample	123	119	99	92	84	96
MB 500-449399/1-A	Method Blank	104	104	81	87	52	86
MB 500-449570/1-A	Method Blank	125	110	93	93	77	96

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-449663/5
Matrix: Solid
Analysis Batch: 449663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			09/14/18 00:57	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			09/14/18 00:57	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			09/14/18 00:57	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			09/14/18 00:57	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			09/14/18 00:57	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			09/14/18 00:57	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			09/14/18 00:57	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			09/14/18 00:57	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			09/14/18 00:57	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			09/14/18 00:57	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			09/14/18 00:57	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			09/14/18 00:57	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			09/14/18 00:57	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			09/14/18 00:57	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			09/14/18 00:57	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			09/14/18 00:57	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			09/14/18 00:57	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			09/14/18 00:57	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			09/14/18 00:57	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			09/14/18 00:57	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			09/14/18 00:57	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			09/14/18 00:57	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			09/14/18 00:57	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			09/14/18 00:57	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			09/14/18 00:57	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			09/14/18 00:57	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			09/14/18 00:57	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/14/18 00:57	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			09/14/18 00:57	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			09/14/18 00:57	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			09/14/18 00:57	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			09/14/18 00:57	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			09/14/18 00:57	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/14/18 00:57	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			09/14/18 00:57	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			09/14/18 00:57	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			09/14/18 00:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131		09/14/18 00:57	1
Dibromofluoromethane	105		75 - 126		09/14/18 00:57	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134		09/14/18 00:57	1
Toluene-d8 (Surr)	98		75 - 124		09/14/18 00:57	1

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-449663/4

Matrix: Solid

Analysis Batch: 449663

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0531		mg/Kg		106	40 - 150
Benzene	0.0500	0.0488		mg/Kg		98	70 - 125
Bromodichloromethane	0.0500	0.0449		mg/Kg		90	67 - 129
Bromoform	0.0500	0.0445		mg/Kg		89	68 - 136
Bromomethane	0.0500	0.0386		mg/Kg		77	70 - 130
2-Butanone (MEK)	0.0500	0.0560		mg/Kg		112	47 - 138
Carbon disulfide	0.0500	0.0496		mg/Kg		99	70 - 129
Carbon tetrachloride	0.0500	0.0495		mg/Kg		99	75 - 125
Chlorobenzene	0.0500	0.0475		mg/Kg		95	50 - 150
Chloroethane	0.0500	0.0324	*	mg/Kg		65	75 - 125
Chloroform	0.0500	0.0473		mg/Kg		95	57 - 135
Chloromethane	0.0500	0.0495		mg/Kg		99	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0481		mg/Kg		96	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0433		mg/Kg		87	70 - 125
Dibromochloromethane	0.0500	0.0463		mg/Kg		93	69 - 125
1,1-Dichloroethane	0.0500	0.0471		mg/Kg		94	70 - 125
1,2-Dichloroethane	0.0500	0.0445		mg/Kg		89	70 - 130
1,1-Dichloroethene	0.0500	0.0515		mg/Kg		103	70 - 120
1,2-Dichloropropane	0.0500	0.0474		mg/Kg		95	70 - 125
Ethylbenzene	0.0500	0.0446		mg/Kg		89	61 - 136
2-Hexanone	0.0500	0.0460		mg/Kg		92	48 - 146
Methylene Chloride	0.0500	0.0487		mg/Kg		97	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0454		mg/Kg		91	50 - 148
Methyl tert-butyl ether	0.0500	0.0422		mg/Kg		84	50 - 140
Styrene	0.0500	0.0464		mg/Kg		93	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0415		mg/Kg		83	70 - 122
Tetrachloroethene	0.0500	0.0503		mg/Kg		101	70 - 124
Toluene	0.0500	0.0468		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0485		mg/Kg		97	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0414		mg/Kg		83	70 - 125
1,1,1-Trichloroethane	0.0500	0.0480		mg/Kg		96	70 - 128
1,1,2-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 125
Trichloroethene	0.0500	0.0551		mg/Kg		110	70 - 125
Vinyl acetate	0.0500	0.0477		mg/Kg		95	40 - 153
Vinyl chloride	0.0500	0.0458		mg/Kg		92	70 - 125
Xylenes, Total	0.100	0.0885		mg/Kg		88	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		75 - 131
Dibromofluoromethane	104		75 - 126
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
Toluene-d8 (Surr)	99		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-449663/29

Matrix: Solid

Analysis Batch: 449663

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0537		mg/Kg		107	40 - 150	1	30
Benzene	0.0500	0.0444		mg/Kg		89	70 - 125	9	30
Bromodichloromethane	0.0500	0.0420		mg/Kg		84	67 - 129	7	30
Bromoform	0.0500	0.0401		mg/Kg		80	68 - 136	10	30
Bromomethane	0.0500	0.0440		mg/Kg		88	70 - 130	13	30
2-Butanone (MEK)	0.0500	0.0498		mg/Kg		100	47 - 138	12	30
Carbon disulfide	0.0500	0.0449		mg/Kg		90	70 - 129	10	30
Carbon tetrachloride	0.0500	0.0444		mg/Kg		89	75 - 125	11	30
Chlorobenzene	0.0500	0.0425		mg/Kg		85	50 - 150	11	30
Chloroethane	0.0500	0.0480	*	mg/Kg		96	75 - 125	39	30
Chloroform	0.0500	0.0438		mg/Kg		88	57 - 135	8	30
Chloromethane	0.0500	0.0552		mg/Kg		110	70 - 125	11	30
cis-1,2-Dichloroethene	0.0500	0.0441		mg/Kg		88	70 - 125	9	30
cis-1,3-Dichloropropene	0.0500	0.0383		mg/Kg		77	70 - 125	12	30
Dibromochloromethane	0.0500	0.0417		mg/Kg		83	69 - 125	10	30
1,1-Dichloroethane	0.0500	0.0423		mg/Kg		85	70 - 125	11	30
1,2-Dichloroethane	0.0500	0.0420		mg/Kg		84	70 - 130	6	30
1,1-Dichloroethene	0.0500	0.0452		mg/Kg		90	70 - 120	13	30
1,2-Dichloropropane	0.0500	0.0448		mg/Kg		90	70 - 125	6	30
Ethylbenzene	0.0500	0.0406		mg/Kg		81	61 - 136	10	30
2-Hexanone	0.0500	0.0432		mg/Kg		86	48 - 146	6	30
Methylene Chloride	0.0500	0.0464		mg/Kg		93	70 - 126	5	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0432		mg/Kg		86	50 - 148	5	30
Methyl tert-butyl ether	0.0500	0.0396		mg/Kg		79	50 - 140	6	30
Styrene	0.0500	0.0416		mg/Kg		83	70 - 125	11	30
1,1,1,2-Tetrachloroethane	0.0500	0.0380		mg/Kg		76	70 - 122	9	30
Tetrachloroethene	0.0500	0.0437		mg/Kg		87	70 - 124	14	30
Toluene	0.0500	0.0421		mg/Kg		84	70 - 125	10	30
trans-1,2-Dichloroethene	0.0500	0.0438		mg/Kg		88	70 - 125	10	30
trans-1,3-Dichloropropene	0.0500	0.0368		mg/Kg		74	70 - 125	12	30
1,1,1-Trichloroethane	0.0500	0.0426		mg/Kg		85	70 - 128	12	30
1,1,2-Trichloroethane	0.0500	0.0412		mg/Kg		82	70 - 125	7	30
Trichloroethene	0.0500	0.0483		mg/Kg		97	70 - 125	13	30
Vinyl acetate	0.0500	0.0412		mg/Kg		82	40 - 153	15	30
Vinyl chloride	0.0500	0.0483		mg/Kg		97	70 - 125	5	30
Xylenes, Total	0.100	0.0778		mg/Kg		78	53 - 147	13	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	92		75 - 131
Dibromofluoromethane	106		75 - 126
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
Toluene-d8 (Surr)	98		75 - 124

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-449814/5
Matrix: Solid
Analysis Batch: 449814

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			09/14/18 10:44	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			09/14/18 10:44	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			09/14/18 10:44	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			09/14/18 10:44	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			09/14/18 10:44	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			09/14/18 10:44	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			09/14/18 10:44	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			09/14/18 10:44	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			09/14/18 10:44	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			09/14/18 10:44	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			09/14/18 10:44	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			09/14/18 10:44	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			09/14/18 10:44	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			09/14/18 10:44	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			09/14/18 10:44	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			09/14/18 10:44	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			09/14/18 10:44	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			09/14/18 10:44	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			09/14/18 10:44	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			09/14/18 10:44	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			09/14/18 10:44	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			09/14/18 10:44	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			09/14/18 10:44	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			09/14/18 10:44	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			09/14/18 10:44	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			09/14/18 10:44	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			09/14/18 10:44	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/14/18 10:44	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			09/14/18 10:44	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			09/14/18 10:44	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			09/14/18 10:44	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			09/14/18 10:44	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			09/14/18 10:44	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/14/18 10:44	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			09/14/18 10:44	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			09/14/18 10:44	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			09/14/18 10:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		75 - 131		09/14/18 10:44	1
Dibromofluoromethane	103		75 - 126		09/14/18 10:44	1
1,2-Dichloroethane-d4 (Surr)	107		70 - 134		09/14/18 10:44	1
Toluene-d8 (Surr)	99		75 - 124		09/14/18 10:44	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-449814/3

Matrix: Solid

Analysis Batch: 449814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0548		mg/Kg		110	40 - 150
Benzene	0.0500	0.0568		mg/Kg		114	70 - 125
Bromodichloromethane	0.0500	0.0567		mg/Kg		113	67 - 129
Bromoform	0.0500	0.0456		mg/Kg		91	68 - 136
Bromomethane	0.0500	0.0416		mg/Kg		83	70 - 130
2-Butanone (MEK)	0.0500	0.0488		mg/Kg		98	47 - 138
Carbon disulfide	0.0500	0.0563		mg/Kg		113	70 - 129
Carbon tetrachloride	0.0500	0.0582		mg/Kg		116	75 - 125
Chlorobenzene	0.0500	0.0516		mg/Kg		103	50 - 150
Chloroethane	0.0500	0.0453		mg/Kg		91	75 - 125
Chloroform	0.0500	0.0579		mg/Kg		116	57 - 135
Chloromethane	0.0500	0.0543		mg/Kg		109	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0567		mg/Kg		113	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0494		mg/Kg		99	70 - 125
Dibromochloromethane	0.0500	0.0493		mg/Kg		99	69 - 125
1,1-Dichloroethane	0.0500	0.0590		mg/Kg		118	70 - 125
1,2-Dichloroethane	0.0500	0.0595		mg/Kg		119	70 - 130
1,1-Dichloroethene	0.0500	0.0571		mg/Kg		114	70 - 120
1,2-Dichloropropane	0.0500	0.0602		mg/Kg		120	70 - 125
Ethylbenzene	0.0500	0.0537		mg/Kg		107	61 - 136
2-Hexanone	0.0500	0.0518		mg/Kg		104	48 - 146
Methylene Chloride	0.0500	0.0549		mg/Kg		110	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0535		mg/Kg		107	50 - 148
Methyl tert-butyl ether	0.0500	0.0538		mg/Kg		108	50 - 140
Styrene	0.0500	0.0501		mg/Kg		100	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0521		mg/Kg		104	70 - 122
Tetrachloroethene	0.0500	0.0517		mg/Kg		103	70 - 124
Toluene	0.0500	0.0514		mg/Kg		103	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0576		mg/Kg		115	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0511		mg/Kg		102	70 - 125
1,1,1-Trichloroethane	0.0500	0.0584		mg/Kg		117	70 - 128
1,1,2-Trichloroethane	0.0500	0.0493		mg/Kg		99	70 - 125
Trichloroethene	0.0500	0.0548		mg/Kg		110	70 - 125
Vinyl acetate	0.0500	0.0495		mg/Kg		99	40 - 153
Vinyl chloride	0.0500	0.0491		mg/Kg		98	70 - 125
Xylenes, Total	0.100	0.105		mg/Kg		105	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		75 - 131
Dibromofluoromethane	101		75 - 126
1,2-Dichloroethane-d4 (Surr)	103		70 - 134
Toluene-d8 (Surr)	102		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-449814/4
Matrix: Solid
Analysis Batch: 449814

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0502		mg/Kg		100	40 - 150	9	30
Benzene	0.0500	0.0568		mg/Kg		114	70 - 125	0	30
Bromodichloromethane	0.0500	0.0568		mg/Kg		114	67 - 129	0	30
Bromoform	0.0500	0.0469		mg/Kg		94	68 - 136	3	30
Bromomethane	0.0500	0.0433		mg/Kg		87	70 - 130	4	30
2-Butanone (MEK)	0.0500	0.0483		mg/Kg		97	47 - 138	1	30
Carbon disulfide	0.0500	0.0560		mg/Kg		112	70 - 129	1	30
Carbon tetrachloride	0.0500	0.0579		mg/Kg		116	75 - 125	0	30
Chlorobenzene	0.0500	0.0519		mg/Kg		104	50 - 150	1	30
Chloroethane	0.0500	0.0496		mg/Kg		99	75 - 125	9	30
Chloroform	0.0500	0.0576		mg/Kg		115	57 - 135	1	30
Chloromethane	0.0500	0.0572		mg/Kg		114	70 - 125	5	30
cis-1,2-Dichloroethene	0.0500	0.0558		mg/Kg		112	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0501		mg/Kg		100	70 - 125	1	30
Dibromochloromethane	0.0500	0.0501		mg/Kg		100	69 - 125	2	30
1,1-Dichloroethane	0.0500	0.0582		mg/Kg		116	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0588		mg/Kg		118	70 - 130	1	30
1,1-Dichloroethene	0.0500	0.0553		mg/Kg		111	70 - 120	3	30
1,2-Dichloropropane	0.0500	0.0600		mg/Kg		120	70 - 125	0	30
Ethylbenzene	0.0500	0.0540		mg/Kg		108	61 - 136	1	30
2-Hexanone	0.0500	0.0520		mg/Kg		104	48 - 146	0	30
Methylene Chloride	0.0500	0.0549		mg/Kg		110	70 - 126	0	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0517		mg/Kg		103	50 - 148	3	30
Methyl tert-butyl ether	0.0500	0.0537		mg/Kg		107	50 - 140	0	30
Styrene	0.0500	0.0512		mg/Kg		102	70 - 125	2	30
1,1,1,2-Tetrachloroethane	0.0500	0.0522		mg/Kg		104	70 - 122	0	30
Tetrachloroethene	0.0500	0.0521		mg/Kg		104	70 - 124	1	30
Toluene	0.0500	0.0518		mg/Kg		104	70 - 125	1	30
trans-1,2-Dichloroethene	0.0500	0.0557		mg/Kg		111	70 - 125	3	30
trans-1,3-Dichloropropene	0.0500	0.0505		mg/Kg		101	70 - 125	1	30
1,1,1-Trichloroethane	0.0500	0.0591		mg/Kg		118	70 - 128	1	30
1,1,2-Trichloroethane	0.0500	0.0502		mg/Kg		100	70 - 125	2	30
Trichloroethene	0.0500	0.0539		mg/Kg		108	70 - 125	2	30
Vinyl acetate	0.0500	0.0498		mg/Kg		100	40 - 153	1	30
Vinyl chloride	0.0500	0.0526		mg/Kg		105	70 - 125	7	30
Xylenes, Total	0.100	0.106		mg/Kg		106	53 - 147	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		75 - 131
Dibromofluoromethane	101		75 - 126
1,2-Dichloroethane-d4 (Surr)	103		70 - 134
Toluene-d8 (Surr)	99		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-449399/1-A

Matrix: Solid

Analysis Batch: 449590

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 449399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Isophorone	<0.17		0.17	0.037	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Carbazole	<0.17		0.17	0.083	mg/Kg		09/12/18 10:03	09/13/18 16:34	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-449399/1-A
Matrix: Solid
Analysis Batch: 449590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		09/12/18 10:03	09/13/18 16:34	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		09/12/18 10:03	09/13/18 16:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	104		46 - 133	09/12/18 10:03	09/13/18 16:34	1
Phenol-d5	104		46 - 125	09/12/18 10:03	09/13/18 16:34	1
Nitrobenzene-d5	81		41 - 120	09/12/18 10:03	09/13/18 16:34	1
2-Fluorobiphenyl	87		44 - 121	09/12/18 10:03	09/13/18 16:34	1
2,4,6-Tribromophenol	52		25 - 139	09/12/18 10:03	09/13/18 16:34	1
Terphenyl-d14	86		35 - 160	09/12/18 10:03	09/13/18 16:34	1

Lab Sample ID: LCS 500-449399/2-A
Matrix: Solid
Analysis Batch: 449590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.24		mg/Kg		93	56 - 122
Bis(2-chloroethyl)ether	1.33	1.18		mg/Kg		88	55 - 111
1,3-Dichlorobenzene	1.33	1.11		mg/Kg		83	60 - 110
1,4-Dichlorobenzene	1.33	1.14		mg/Kg		86	61 - 110
1,2-Dichlorobenzene	1.33	1.15		mg/Kg		86	62 - 110
2-Methylphenol	1.33	1.19		mg/Kg		89	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.27		mg/Kg		95	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.19		mg/Kg		89	56 - 118
Hexachloroethane	1.33	1.11		mg/Kg		83	60 - 114
2-Chlorophenol	1.33	1.22		mg/Kg		92	64 - 110
Nitrobenzene	1.33	1.21		mg/Kg		91	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.22		mg/Kg		92	60 - 112
1,2,4-Trichlorobenzene	1.33	1.20		mg/Kg		90	62 - 110
Isophorone	1.33	1.11		mg/Kg		83	55 - 110
2,4-Dimethylphenol	1.33	1.18		mg/Kg		88	60 - 110
Hexachlorobutadiene	1.33	1.16		mg/Kg		87	56 - 120
Naphthalene	1.33	1.21		mg/Kg		91	63 - 110
2,4-Dichlorophenol	1.33	1.23		mg/Kg		92	58 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-449399/2-A
Matrix: Solid
Analysis Batch: 449590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.10		mg/Kg		82	30 - 150
2,4,6-Trichlorophenol	1.33	1.11		mg/Kg		83	57 - 120
2,4,5-Trichlorophenol	1.33	1.16		mg/Kg		87	50 - 120
Hexachlorocyclopentadiene	1.33	0.316	J	mg/Kg		24	10 - 133
2-Methylnaphthalene	1.33	1.21		mg/Kg		91	62 - 110
2-Nitroaniline	1.33	1.27		mg/Kg		95	57 - 124
2-Chloronaphthalene	1.33	1.21		mg/Kg		91	64 - 110
4-Chloro-3-methylphenol	1.33	1.22		mg/Kg		92	65 - 122
2,6-Dinitrotoluene	1.33	1.33		mg/Kg		99	67 - 120
2-Nitrophenol	1.33	1.22		mg/Kg		92	60 - 120
3-Nitroaniline	1.33	1.12		mg/Kg		84	40 - 122
Dimethyl phthalate	1.33	1.21		mg/Kg		90	64 - 110
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		4	10 - 100
Acenaphthylene	1.33	1.23		mg/Kg		92	60 - 110
2,4-Dinitrotoluene	1.33	1.30		mg/Kg		97	62 - 117
Acenaphthene	1.33	1.26		mg/Kg		95	62 - 119
Dibenzofuran	1.33	1.22		mg/Kg		91	64 - 110
4-Nitrophenol	2.67	2.11		mg/Kg		79	30 - 122
Fluorene	1.33	1.22		mg/Kg		91	62 - 120
4-Nitroaniline	1.33	1.18		mg/Kg		88	60 - 160
4-Bromophenyl phenyl ether	1.33	1.23		mg/Kg		92	63 - 110
Hexachlorobenzene	1.33	1.25		mg/Kg		94	55 - 117
Diethyl phthalate	1.33	1.19		mg/Kg		89	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.21		mg/Kg		91	63 - 110
Pentachlorophenol	2.67	0.728		mg/Kg		27	13 - 112
N-Nitrosodiphenylamine	1.33	1.26		mg/Kg		95	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.360	J	mg/Kg		14	10 - 110
Phenanthrene	1.33	1.24		mg/Kg		93	62 - 120
Anthracene	1.33	1.25		mg/Kg		94	63 - 110
Carbazole	1.33	1.26		mg/Kg		94	59 - 158
Di-n-butyl phthalate	1.33	1.26		mg/Kg		95	65 - 120
Fluoranthene	1.33	1.27		mg/Kg		95	62 - 120
Pyrene	1.33	1.29		mg/Kg		97	61 - 128
Butyl benzyl phthalate	1.33	1.32		mg/Kg		99	61 - 116
Benzo[a]anthracene	1.33	1.28		mg/Kg		96	67 - 122
Chrysene	1.33	1.23		mg/Kg		93	63 - 120
3,3'-Dichlorobenzidine	1.33	1.13		mg/Kg		85	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.37		mg/Kg		103	63 - 118
Di-n-octyl phthalate	1.33	1.27		mg/Kg		96	63 - 119
Benzo[b]fluoranthene	1.33	1.40		mg/Kg		105	64 - 127
Benzo[k]fluoranthene	1.33	1.26		mg/Kg		95	65 - 120
Benzo[a]pyrene	1.33	1.36		mg/Kg		102	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.32		mg/Kg		99	57 - 127
Dibenz(a,h)anthracene	1.33	1.33		mg/Kg		100	64 - 119
Benzo[g,h,i]perylene	1.33	1.25		mg/Kg		94	65 - 132
3 & 4 Methylphenol	1.33	1.20		mg/Kg		90	57 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-449399/2-A
Matrix: Solid
Analysis Batch: 449590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449399

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	106		46 - 133
Phenol-d5	101		46 - 125
Nitrobenzene-d5	87		41 - 120
2-Fluorobiphenyl	90		44 - 121
2,4,6-Tribromophenol	85		25 - 139
Terphenyl-d14	89		35 - 160

Lab Sample ID: MB 500-449570/1-A
Matrix: Solid
Analysis Batch: 450028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449570

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Isophorone	<0.17		0.17	0.037	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		09/13/18 07:21	09/15/18 16:43	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-449570/1-A
Matrix: Solid
Analysis Batch: 450028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449570

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.033		0.033	0.0047	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Carbazole	<0.17		0.17	0.083	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		09/13/18 07:21	09/15/18 16:43	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		09/13/18 07:21	09/15/18 16:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	125		46 - 133	09/13/18 07:21	09/15/18 16:43	1
Phenol-d5	110		46 - 125	09/13/18 07:21	09/15/18 16:43	1
Nitrobenzene-d5	93		41 - 120	09/13/18 07:21	09/15/18 16:43	1
2-Fluorobiphenyl	93		44 - 121	09/13/18 07:21	09/15/18 16:43	1
2,4,6-Tribromophenol	77		25 - 139	09/13/18 07:21	09/15/18 16:43	1
Terphenyl-d14	96		35 - 160	09/13/18 07:21	09/15/18 16:43	1

Lab Sample ID: LCS 500-449570/2-A
Matrix: Solid
Analysis Batch: 450028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449570

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.27		mg/Kg		95	56 - 122
Bis(2-chloroethyl)ether	1.33	1.26		mg/Kg		94	55 - 111
1,3-Dichlorobenzene	1.33	1.14		mg/Kg		85	60 - 110
1,4-Dichlorobenzene	1.33	1.17		mg/Kg		88	61 - 110
1,2-Dichlorobenzene	1.33	1.20		mg/Kg		90	62 - 110
2-Methylphenol	1.33	1.44		mg/Kg		108	60 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-449570/2-A
Matrix: Solid
Analysis Batch: 450028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449570

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	1.33	1.15		mg/Kg		86	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.28		mg/Kg		96	56 - 118
Hexachloroethane	1.33	1.16		mg/Kg		87	60 - 114
2-Chlorophenol	1.33	1.24		mg/Kg		93	64 - 110
Nitrobenzene	1.33	1.19		mg/Kg		89	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.18		mg/Kg		88	60 - 112
1,2,4-Trichlorobenzene	1.33	1.20		mg/Kg		90	62 - 110
Isophorone	1.33	1.09		mg/Kg		81	55 - 110
2,4-Dimethylphenol	1.33	1.01		mg/Kg		76	60 - 110
Hexachlorobutadiene	1.33	1.11		mg/Kg		83	56 - 120
Naphthalene	1.33	1.18		mg/Kg		88	63 - 110
2,4-Dichlorophenol	1.33	1.24		mg/Kg		93	58 - 120
4-Chloroaniline	1.33	1.11		mg/Kg		83	30 - 150
2,4,6-Trichlorophenol	1.33	1.07		mg/Kg		80	57 - 120
2,4,5-Trichlorophenol	1.33	1.02		mg/Kg		77	50 - 120
Hexachlorocyclopentadiene	1.33	0.657	J	mg/Kg		49	10 - 133
2-Methylnaphthalene	1.33	1.15		mg/Kg		87	62 - 110
2-Nitroaniline	1.33	1.23		mg/Kg		93	57 - 124
2-Chloronaphthalene	1.33	1.23		mg/Kg		92	64 - 110
4-Chloro-3-methylphenol	1.33	1.28		mg/Kg		96	65 - 122
2,6-Dinitrotoluene	1.33	1.29		mg/Kg		97	67 - 120
2-Nitrophenol	1.33	1.21		mg/Kg		91	60 - 120
3-Nitroaniline	1.33	0.992		mg/Kg		74	40 - 122
Dimethyl phthalate	1.33	1.22		mg/Kg		91	64 - 110
2,4-Dinitrophenol	2.67	0.732		mg/Kg		27	10 - 100
Acenaphthylene	1.33	1.17		mg/Kg		88	60 - 110
2,4-Dinitrotoluene	1.33	1.24		mg/Kg		93	62 - 117
Acenaphthene	1.33	1.25		mg/Kg		94	62 - 119
Dibenzofuran	1.33	1.15		mg/Kg		86	64 - 110
4-Nitrophenol	2.67	2.58		mg/Kg		97	30 - 122
Fluorene	1.33	1.15		mg/Kg		86	62 - 120
4-Nitroaniline	1.33	1.19		mg/Kg		89	60 - 160
4-Bromophenyl phenyl ether	1.33	1.24		mg/Kg		93	63 - 110
Hexachlorobenzene	1.33	1.14		mg/Kg		85	55 - 117
Diethyl phthalate	1.33	1.16		mg/Kg		87	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.16		mg/Kg		87	63 - 110
Pentachlorophenol	2.67	1.94		mg/Kg		73	13 - 112
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		94	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.34		mg/Kg		50	10 - 110
Phenanthrene	1.33	1.27		mg/Kg		95	62 - 120
Anthracene	1.33	1.31		mg/Kg		98	63 - 110
Carbazole	1.33	1.36		mg/Kg		102	59 - 158
Di-n-butyl phthalate	1.33	1.26		mg/Kg		95	65 - 120
Fluoranthene	1.33	1.24		mg/Kg		93	62 - 120
Pyrene	1.33	1.30		mg/Kg		98	61 - 128
Butyl benzyl phthalate	1.33	1.38		mg/Kg		103	61 - 116
Benzo[a]anthracene	1.33	1.31		mg/Kg		99	67 - 122
Chrysene	1.33	1.27		mg/Kg		95	63 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-449570/2-A
Matrix: Solid
Analysis Batch: 450028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449570

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
3,3'-Dichlorobenzidine	1.33	1.11		mg/Kg		83	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.44		mg/Kg		108	63 - 118
Di-n-octyl phthalate	1.33	1.38		mg/Kg		103	63 - 119
Benzo[b]fluoranthene	1.33	1.30		mg/Kg		98	64 - 127
Benzo[k]fluoranthene	1.33	1.19		mg/Kg		89	65 - 120
Benzo[a]pyrene	1.33	1.14		mg/Kg		85	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.16		mg/Kg		87	57 - 127
Dibenz(a,h)anthracene	1.33	1.17		mg/Kg		88	64 - 119
Benzo[g,h,i]perylene	1.33	1.27		mg/Kg		95	65 - 132
3 & 4 Methylphenol	1.33	1.37		mg/Kg		102	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	123		46 - 133
Phenol-d5	119		46 - 125
Nitrobenzene-d5	99		41 - 120
2-Fluorobiphenyl	92		44 - 121
2,4,6-Tribromophenol	84		25 - 139
Terphenyl-d14	96		35 - 160

Lab Sample ID: 500-150990-1 MS
Matrix: Solid
Analysis Batch: 450107

Client Sample ID: 2615V-118-B38 (0-3)
Prep Type: Total/NA
Prep Batch: 449570

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20		1.57	1.70		mg/Kg	☼	108	56 - 122
Bis(2-chloroethyl)ether	<0.20		1.57	1.42		mg/Kg	☼	90	55 - 111
1,3-Dichlorobenzene	<0.20		1.57	1.24		mg/Kg	☼	79	60 - 110
1,4-Dichlorobenzene	<0.20		1.57	1.26		mg/Kg	☼	80	61 - 110
1,2-Dichlorobenzene	<0.20		1.57	1.31		mg/Kg	☼	83	62 - 110
2-Methylphenol	<0.20		1.57	1.66		mg/Kg	☼	106	60 - 120
2,2'-oxybis[1-chloropropane]	<0.20		1.57	1.49		mg/Kg	☼	95	40 - 124
N-Nitrosodi-n-propylamine	<0.079		1.57	1.44		mg/Kg	☼	91	56 - 118
Hexachloroethane	<0.20	F1	1.57	0.874	F1	mg/Kg	☼	56	60 - 114
2-Chlorophenol	<0.20		1.57	1.53		mg/Kg	☼	97	64 - 110
Nitrobenzene	<0.039		1.57	1.42		mg/Kg	☼	90	60 - 116
Bis(2-chloroethoxy)methane	<0.20		1.57	1.47		mg/Kg	☼	93	60 - 112
1,2,4-Trichlorobenzene	<0.20		1.57	1.39		mg/Kg	☼	88	62 - 110
Isophorone	<0.20		1.57	1.36		mg/Kg	☼	87	55 - 110
2,4-Dimethylphenol	<0.39		1.57	1.10		mg/Kg	☼	70	60 - 110
Hexachlorobutadiene	<0.20		1.57	1.27		mg/Kg	☼	81	56 - 120
Naphthalene	0.011	J	1.57	1.42		mg/Kg	☼	90	63 - 110
2,4-Dichlorophenol	<0.39		1.57	1.54		mg/Kg	☼	98	58 - 120
4-Chloroaniline	<0.79	F2	1.57	0.927		mg/Kg	☼	59	30 - 150
2,4,6-Trichlorophenol	<0.39		1.57	1.09		mg/Kg	☼	69	57 - 120
2,4,5-Trichlorophenol	<0.39		1.57	1.41		mg/Kg	☼	89	50 - 120
Hexachlorocyclopentadiene	<0.79	F1	1.57	<0.79	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.0079	J	1.57	1.53		mg/Kg	☼	97	62 - 110
2-Nitroaniline	<0.20		1.57	1.51		mg/Kg	☼	96	57 - 124

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-150990-1 MS

Matrix: Solid

Analysis Batch: 450107

Client Sample ID: 2615V-118-B38 (0-3)

Prep Type: Total/NA

Prep Batch: 449570

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS Qualifier	Unit	D	%Rec	Limits
	Result			Result					
2-Chloronaphthalene	<0.20		1.57	1.52		mg/Kg	☼	97	64 - 110
4-Chloro-3-methylphenol	<0.39	F1 F2	1.57	0.959	F1	mg/Kg	☼	61	65 - 122
2,6-Dinitrotoluene	<0.20		1.57	1.56		mg/Kg	☼	99	67 - 120
2-Nitrophenol	<0.39		1.57	1.40		mg/Kg	☼	89	60 - 120
3-Nitroaniline	<0.39		1.57	1.55		mg/Kg	☼	98	40 - 122
Dimethyl phthalate	<0.20		1.57	1.52		mg/Kg	☼	96	64 - 110
2,4-Dinitrophenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.039		1.57	1.56		mg/Kg	☼	99	60 - 110
2,4-Dinitrotoluene	<0.20		1.57	1.38		mg/Kg	☼	88	62 - 117
Acenaphthene	0.029	J	1.57	1.68		mg/Kg	☼	105	62 - 119
Dibenzofuran	<0.20		1.57	1.62		mg/Kg	☼	103	64 - 110
4-Nitrophenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	30 - 122
Fluorene	0.014	J	1.57	1.67		mg/Kg	☼	105	62 - 120
4-Nitroaniline	<0.39		1.57	1.36		mg/Kg	☼	87	60 - 160
4-Bromophenyl phenyl ether	<0.20		1.57	1.56		mg/Kg	☼	99	63 - 110
Hexachlorobenzene	<0.079		1.57	1.56		mg/Kg	☼	99	55 - 117
Diethyl phthalate	<0.20		1.57	1.55		mg/Kg	☼	99	58 - 120
4-Chlorophenyl phenyl ether	<0.20		1.57	1.57		mg/Kg	☼	100	63 - 110
Pentachlorophenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	13 - 112
N-Nitrosodiphenylamine	<0.20	F1	1.57	1.79	F1	mg/Kg	☼	114	65 - 112
4,6-Dinitro-2-methylphenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	10 - 110
Phenanthrene	0.16		1.57	1.80		mg/Kg	☼	104	62 - 120
Anthracene	0.014	J	1.57	1.65		mg/Kg	☼	104	63 - 110
Carbazole	<0.20		1.57	1.68		mg/Kg	☼	107	59 - 158
Di-n-butyl phthalate	<0.20		1.57	1.64		mg/Kg	☼	104	65 - 120
Fluoranthene	0.049		1.57	1.76		mg/Kg	☼	109	62 - 120
Pyrene	0.079	F1	1.57	2.14	F1	mg/Kg	☼	131	61 - 128
Butyl benzyl phthalate	<0.20	F1	1.57	1.99	F1	mg/Kg	☼	127	61 - 116
Benzo[a]anthracene	0.025	J	1.57	1.77		mg/Kg	☼	111	67 - 122
Chrysene	0.060		1.57	1.71		mg/Kg	☼	105	63 - 120
3,3'-Dichlorobenzidine	<0.20		1.57	1.15		mg/Kg	☼	73	35 - 128
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.57	2.20	F1	mg/Kg	☼	140	63 - 118
Di-n-octyl phthalate	<0.20		1.57	1.54		mg/Kg	☼	98	63 - 119
Benzo[b]fluoranthene	0.040	F1	1.57	2.17	F1	mg/Kg	☼	135	64 - 127
Benzo[k]fluoranthene	0.019	J F1	1.57	2.09	F1	mg/Kg	☼	132	65 - 120
Benzo[a]pyrene	0.022	J	1.57	1.84		mg/Kg	☼	116	61 - 120
Indeno[1,2,3-cd]pyrene	0.019	J	1.57	1.02		mg/Kg	☼	64	57 - 127
Dibenz(a,h)anthracene	<0.039		1.57	1.06		mg/Kg	☼	68	64 - 119
Benzo[g,h,i]perylene	0.030	J F1	1.57	0.821	F1	mg/Kg	☼	50	65 - 132
3 & 4 Methylphenol	<0.20		1.57	1.67		mg/Kg	☼	106	57 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	115		46 - 133
Phenol-d5	66		46 - 125
Nitrobenzene-d5	92		41 - 120
2-Fluorobiphenyl	99		44 - 121
2,4,6-Tribromophenol	58		25 - 139
Terphenyl-d14	123		35 - 160

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Lab Sample ID: 500-150990-1 MSD
Matrix: Solid
Analysis Batch: 450107

Client Sample ID: 2615V-118-B38 (0-3)
Prep Type: Total/NA
Prep Batch: 449570

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
	Result			Result					Limits		
Phenol	<0.20		1.58	1.76		mg/Kg	☼	112	56 - 122	4	30
Bis(2-chloroethyl)ether	<0.20		1.58	1.46		mg/Kg	☼	92	55 - 111	3	30
1,3-Dichlorobenzene	<0.20		1.58	1.52		mg/Kg	☼	96	60 - 110	20	30
1,4-Dichlorobenzene	<0.20		1.58	1.54		mg/Kg	☼	98	61 - 110	20	30
1,2-Dichlorobenzene	<0.20		1.58	1.51		mg/Kg	☼	96	62 - 110	14	30
2-Methylphenol	<0.20		1.58	1.71		mg/Kg	☼	108	60 - 120	3	30
2,2'-oxybis[1-chloropropane]	<0.20		1.58	1.61		mg/Kg	☼	102	40 - 124	8	30
N-Nitrosodi-n-propylamine	<0.079		1.58	1.53		mg/Kg	☼	97	56 - 118	6	30
Hexachloroethane	<0.20	F1	1.58	0.959		mg/Kg	☼	61	60 - 114	9	30
2-Chlorophenol	<0.20		1.58	1.67		mg/Kg	☼	106	64 - 110	9	30
Nitrobenzene	<0.039		1.58	1.62		mg/Kg	☼	103	60 - 116	13	30
Bis(2-chloroethoxy)methane	<0.20		1.58	1.66		mg/Kg	☼	105	60 - 112	13	30
1,2,4-Trichlorobenzene	<0.20		1.58	1.63		mg/Kg	☼	103	62 - 110	16	30
Isophorone	<0.20		1.58	1.48		mg/Kg	☼	94	55 - 110	8	30
2,4-Dimethylphenol	<0.39		1.58	1.45		mg/Kg	☼	92	60 - 110	28	30
Hexachlorobutadiene	<0.20		1.58	1.51		mg/Kg	☼	96	56 - 120	17	30
Naphthalene	0.011	J	1.58	1.65		mg/Kg	☼	104	63 - 110	15	30
2,4-Dichlorophenol	<0.39		1.58	1.69		mg/Kg	☼	107	58 - 120	10	30
4-Chloroaniline	<0.79	F2	1.58	1.27	F2	mg/Kg	☼	81	30 - 150	31	30
2,4,6-Trichlorophenol	<0.39		1.58	1.45		mg/Kg	☼	92	57 - 120	29	30
2,4,5-Trichlorophenol	<0.39		1.58	1.53		mg/Kg	☼	97	50 - 120	8	30
Hexachlorocyclopentadiene	<0.79	F1	1.58	<0.79	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.0079	J	1.58	1.65		mg/Kg	☼	104	62 - 110	8	30
2-Nitroaniline	<0.20		1.58	1.65		mg/Kg	☼	105	57 - 124	9	30
2-Chloronaphthalene	<0.20		1.58	1.67		mg/Kg	☼	106	64 - 110	9	30
4-Chloro-3-methylphenol	<0.39	F1 F2	1.58	1.53	F2	mg/Kg	☼	97	65 - 122	46	30
2,6-Dinitrotoluene	<0.20		1.58	1.65		mg/Kg	☼	105	67 - 120	6	30
2-Nitrophenol	<0.39		1.58	1.56		mg/Kg	☼	99	60 - 120	11	30
3-Nitroaniline	<0.39		1.58	1.75		mg/Kg	☼	111	40 - 122	12	30
Dimethyl phthalate	<0.20		1.58	1.62		mg/Kg	☼	103	64 - 110	7	30
2,4-Dinitrophenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.039		1.58	1.68		mg/Kg	☼	106	60 - 110	7	30
2,4-Dinitrotoluene	<0.20		1.58	1.43		mg/Kg	☼	91	62 - 117	3	30
Acenaphthene	0.029	J	1.58	1.78		mg/Kg	☼	111	62 - 119	6	30
Dibenzofuran	<0.20		1.58	1.71		mg/Kg	☼	109	64 - 110	6	30
4-Nitrophenol	<0.79	F1	3.15	2.05		mg/Kg	☼	65	30 - 122	NC	30
Fluorene	0.014	J	1.58	1.75		mg/Kg	☼	110	62 - 120	5	30
4-Nitroaniline	<0.39		1.58	1.65		mg/Kg	☼	105	60 - 160	19	30
4-Bromophenyl phenyl ether	<0.20		1.58	1.65		mg/Kg	☼	105	63 - 110	5	30
Hexachlorobenzene	<0.079		1.58	1.68		mg/Kg	☼	107	55 - 117	7	30
Diethyl phthalate	<0.20		1.58	1.61		mg/Kg	☼	102	58 - 120	4	30
4-Chlorophenyl phenyl ether	<0.20		1.58	1.67		mg/Kg	☼	106	63 - 110	6	30
Pentachlorophenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	13 - 112	NC	30
N-Nitrosodiphenylamine	<0.20	F1	1.58	1.81	F1	mg/Kg	☼	115	65 - 112	1	30
4,6-Dinitro-2-methylphenol	<0.79	F1	3.15	<0.79	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.16		1.58	1.84		mg/Kg	☼	106	62 - 120	2	30
Anthracene	0.014	J	1.58	1.72		mg/Kg	☼	109	63 - 110	4	30
Carbazole	<0.20		1.58	1.78		mg/Kg	☼	113	59 - 158	6	30
Di-n-butyl phthalate	<0.20		1.58	1.71		mg/Kg	☼	109	65 - 120	4	30
Fluoranthene	0.049		1.58	1.74		mg/Kg	☼	107	62 - 120	1	30

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-150990-1 MSD

Matrix: Solid

Analysis Batch: 450107

Client Sample ID: 2615V-118-B38 (0-3)

Prep Type: Total/NA

Prep Batch: 449570

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Pyrene	0.079	F1	1.58	2.22	F1	mg/Kg	☼	136	61 - 128	4	30	
Butyl benzyl phthalate	<0.20	F1	1.58	2.18	F1	mg/Kg	☼	138	61 - 116	9	30	
Benzo[a]anthracene	0.025	J	1.58	1.79		mg/Kg	☼	112	67 - 122	1	30	
Chrysene	0.060		1.58	1.71		mg/Kg	☼	105	63 - 120	0	30	
3,3'-Dichlorobenzidine	<0.20		1.58	1.32		mg/Kg	☼	84	35 - 128	14	30	
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.58	2.39	F1	mg/Kg	☼	152	63 - 118	8	30	
Di-n-octyl phthalate	<0.20		1.58	1.60		mg/Kg	☼	101	63 - 119	4	30	
Benzo[b]fluoranthene	0.040	F1	1.58	2.38	F1	mg/Kg	☼	148	64 - 127	9	30	
Benzo[k]fluoranthene	0.019	J F1	1.58	2.36	F1	mg/Kg	☼	149	65 - 120	12	30	
Benzo[a]pyrene	0.022	J	1.58	1.90		mg/Kg	☼	119	61 - 120	3	30	
Indeno[1,2,3-cd]pyrene	0.019	J	1.58	0.941		mg/Kg	☼	58	57 - 127	8	30	
Dibenz(a,h)anthracene	<0.039		1.58	1.01		mg/Kg	☼	64	64 - 119	6	30	
Benzo[g,h,i]perylene	0.030	J F1	1.58	0.754	F1	mg/Kg	☼	46	65 - 132	8	30	
3 & 4 Methylphenol	<0.20		1.58	1.62		mg/Kg	☼	103	57 - 120	3	30	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	116		46 - 133
Phenol-d5	114		46 - 125
Nitrobenzene-d5	94		41 - 120
2-Fluorobiphenyl	105		44 - 121
2,4,6-Tribromophenol	70		25 - 139
Terphenyl-d14	130		35 - 160

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-449058/1-A

Matrix: Solid

Analysis Batch: 449628

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 449058

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Arsenic	<1.0	L	1.0	0.34	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Barium	<1.0		1.0	0.11	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Beryllium	<0.40		0.40	0.093	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Boron	<5.0		5.0	0.47	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Cadmium	0.161	J	0.20	0.036	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Calcium	10.2	J	20	3.4	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Chromium	<1.0		1.0	0.50	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Cobalt	<0.50		0.50	0.13	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Copper	1.12		1.0	0.28	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Iron	<20		20	10	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Magnesium	6.74	J	10	5.0	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Manganese	<1.0		1.0	0.15	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Nickel	<1.0		1.0	0.29	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Potassium	<50		50	18	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Selenium	<1.0		1.0	0.59	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Silver	<0.50		0.50	0.13	mg/Kg		09/11/18 08:10	09/12/18 21:14	1
Sodium	<100		100	15	mg/Kg		09/11/18 08:10	09/12/18 21:14	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-449058/1-A
Matrix: Solid
Analysis Batch: 449628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449058

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.50		0.50	0.12	mg/Kg		09/11/18 08:10	09/12/18 21:14	1

Lab Sample ID: MB 500-449058/1-A
Matrix: Solid
Analysis Batch: 449781

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449058

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	10.7	J	20	3.4	mg/Kg		09/11/18 08:10	09/13/18 17:58	1
Lead	<0.50		0.50	0.23	mg/Kg		09/11/18 08:10	09/13/18 17:58	1
Thallium	<1.0		1.0	0.50	mg/Kg		09/11/18 08:10	09/13/18 17:58	1
Zinc	1.58	J	2.0	0.88	mg/Kg		09/11/18 08:10	09/13/18 17:58	1

Lab Sample ID: LCS 500-449058/2-A
Matrix: Solid
Analysis Batch: 449628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	46.6		mg/Kg		93	80 - 120
Arsenic	10.0	8.98		mg/Kg		90	80 - 120
Barium	200	191		mg/Kg		96	80 - 120
Beryllium	5.00	4.83		mg/Kg		97	80 - 120
Boron	100	84.2		mg/Kg		84	80 - 120
Cadmium	5.00	5.05		mg/Kg		101	80 - 120
Calcium	1000	982		mg/Kg		98	80 - 120
Chromium	20.0	19.7		mg/Kg		99	80 - 120
Cobalt	50.0	50.0		mg/Kg		100	80 - 120
Copper	25.0	26.3		mg/Kg		105	80 - 120
Iron	100	105		mg/Kg		105	80 - 120
Magnesium	1000	945		mg/Kg		95	80 - 120
Manganese	50.0	49.6		mg/Kg		99	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Potassium	1000	900		mg/Kg		90	80 - 120
Selenium	10.0	8.47		mg/Kg		85	80 - 120
Silver	5.00	4.37		mg/Kg		87	80 - 120
Sodium	1000	960		mg/Kg		96	80 - 120
Vanadium	50.0	49.7		mg/Kg		99	80 - 120

Lab Sample ID: LCS 500-449058/2-A
Matrix: Solid
Analysis Batch: 449781

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Calcium	1000	965		mg/Kg		96	80 - 120
Lead	10.0	8.82		mg/Kg		88	80 - 120
Thallium	10.0	8.92		mg/Kg		89	80 - 120
Zinc	50.0	47.4		mg/Kg		95	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-449069/1-A
Matrix: Solid
Analysis Batch: 449629

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Arsenic	<1.0		1.0	0.34	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Barium	<1.0		1.0	0.11	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Beryllium	<0.40		0.40	0.093	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Boron	<5.0		5.0	0.47	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Cadmium	0.0779	J	0.20	0.036	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Calcium	<20		20	3.4	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Chromium	<1.0		1.0	0.50	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Cobalt	<0.50		0.50	0.13	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Iron	<20		20	10	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Magnesium	<10		10	5.0	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Manganese	<1.0		1.0	0.15	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Nickel	<1.0		1.0	0.29	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Potassium	<50		50	18	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Selenium	0.764	J	1.0	0.59	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Silver	<0.50		0.50	0.13	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Sodium	<100		100	15	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Thallium	<1.0	^	1.0	0.50	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Vanadium	<0.50		0.50	0.12	mg/Kg		09/11/18 08:23	09/13/18 00:44	1
Zinc	2.58		2.0	0.88	mg/Kg		09/11/18 08:23	09/13/18 00:44	1

Lab Sample ID: MB 500-449069/1-A
Matrix: Solid
Analysis Batch: 449791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3.57	J	20	3.4	mg/Kg		09/11/18 08:23	09/13/18 17:30	1
Copper	1.02		1.0	0.28	mg/Kg		09/11/18 08:23	09/13/18 17:30	1
Lead	<0.50		0.50	0.23	mg/Kg		09/11/18 08:23	09/13/18 17:30	1

Lab Sample ID: LCS 500-449069/2-A
Matrix: Solid
Analysis Batch: 449629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	10.0	9.06		mg/Kg		91	80 - 120
Barium	200	191		mg/Kg		95	80 - 120
Beryllium	5.00	4.67		mg/Kg		93	80 - 120
Boron	100	83.4		mg/Kg		83	80 - 120
Cadmium	5.00	4.94		mg/Kg		99	80 - 120
Calcium	1000	951		mg/Kg		95	80 - 120
Chromium	20.0	18.9		mg/Kg		95	80 - 120
Cobalt	50.0	48.4		mg/Kg		97	80 - 120
Iron	100	107		mg/Kg		107	80 - 120
Magnesium	1000	949		mg/Kg		95	80 - 120
Manganese	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	47.4		mg/Kg		95	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-449069/2-A
Matrix: Solid
Analysis Batch: 449629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449069
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Potassium	1000	920		mg/Kg		92	80 - 120
Selenium	10.0	7.99		mg/Kg		80	80 - 120
Silver	5.00	4.20		mg/Kg		84	80 - 120
Sodium	1000	972		mg/Kg		97	80 - 120
Thallium	10.0	8.11	^	mg/Kg		81	80 - 120
Vanadium	50.0	48.5		mg/Kg		97	80 - 120
Zinc	50.0	48.1		mg/Kg		96	80 - 120

Lab Sample ID: LCS 500-449069/2-A
Matrix: Solid
Analysis Batch: 449791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449069
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Calcium	1000	911		mg/Kg		91	80 - 120
Copper	25.0	25.1		mg/Kg		100	80 - 120
Lead	10.0	9.17		mg/Kg		92	80 - 120

Lab Sample ID: LCS 500-449161/2-A
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449161
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.494	J	mg/L		99	80 - 120
Beryllium	0.0500	0.0503		mg/L		101	80 - 120
Boron	1.00	0.994		mg/L		99	80 - 120
Cadmium	0.0500	0.0481		mg/L		96	80 - 120
Chromium	0.200	0.198		mg/L		99	80 - 120
Cobalt	0.500	0.476	^	mg/L		95	80 - 120
Iron	1.00	0.997		mg/L		100	80 - 120
Lead	0.100	0.0965		mg/L		97	80 - 120
Manganese	0.500	0.492		mg/L		98	80 - 120
Nickel	0.500	0.481		mg/L		96	80 - 120
Selenium	0.100	0.0848		mg/L		85	80 - 120
Silver	0.0500	0.0464		mg/L		93	80 - 120
Zinc	0.500	0.470	J	mg/L		94	80 - 120

Lab Sample ID: LCS 500-449161/2-A
Matrix: Solid
Analysis Batch: 449686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449161
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cobalt	0.500	0.501		mg/L		100	80 - 120
Nickel	0.500	0.498		mg/L		100	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-449238/2-A
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cadmium	0.0500	0.0503		mg/L		101	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Manganese	0.500	0.505		mg/L		101	80 - 120

Lab Sample ID: LCS 500-449243/2-A
Matrix: Solid
Analysis Batch: 449563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.459		mg/L		92	80 - 120

Lab Sample ID: LCS 500-449246/2-A
Matrix: Solid
Analysis Batch: 449563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.483	J	mg/L		97	80 - 120
Beryllium	0.0500	0.0467		mg/L		93	80 - 120
Boron	1.00	0.908		mg/L		91	80 - 120
Cadmium	0.0500	0.0467		mg/L		93	80 - 120
Chromium	0.200	0.188		mg/L		94	80 - 120
Cobalt	0.500	0.469		mg/L		94	80 - 120
Iron	1.00	0.968		mg/L		97	80 - 120
Lead	0.100	0.0892		mg/L		89	80 - 120
Manganese	0.500	0.471		mg/L		94	80 - 120
Nickel	0.500	0.468		mg/L		94	80 - 120
Selenium	0.100	0.0891		mg/L		89	80 - 120
Silver	0.0500	0.0458		mg/L		92	80 - 120
Zinc	0.500	0.455	J	mg/L		91	80 - 120

Lab Sample ID: LB 500-449021/1-B
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449161

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		09/11/18 09:45	09/12/18 16:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 09:45	09/12/18 16:41	1
Boron	<0.50		0.50	0.050	mg/L		09/11/18 09:45	09/12/18 16:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 09:45	09/12/18 16:41	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 16:41	1
Cobalt	<0.025	^	0.025	0.010	mg/L		09/11/18 09:45	09/12/18 16:41	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 09:45	09/12/18 16:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 09:45	09/12/18 16:41	1
Manganese	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 16:41	1
Nickel	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 16:41	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 09:45	09/12/18 16:41	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/12/18 16:41	1
Zinc	0.133	J	0.50	0.020	mg/L		09/11/18 09:45	09/12/18 16:41	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-449021/1-B
Matrix: Solid
Analysis Batch: 449686

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449161

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:12	1
Nickel	<0.025		0.025	0.010	mg/L		09/11/18 09:45	09/13/18 11:12	1

Lab Sample ID: 500-150990-20 MS
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: TCLP
Prep Batch: 449161

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.43	J	0.500	0.919		mg/L		97	75 - 125
Beryllium	<0.0040		0.0500	0.0535		mg/L		107	75 - 125
Boron	0.075	J	1.00	1.13		mg/L		106	75 - 125
Cadmium	0.0063		0.0500	0.0544		mg/L		96	75 - 125
Chromium	<0.025		0.200	0.204		mg/L		102	75 - 125
Cobalt	0.011	J ^	0.500	0.484	^	mg/L		95	75 - 125
Iron	<0.40		1.00	1.13		mg/L		113	75 - 125
Lead	0.11		0.100	0.213		mg/L		105	75 - 125
Manganese	1.1		0.500	1.57		mg/L		96	75 - 125
Selenium	<0.050		0.100	0.102		mg/L		102	75 - 125
Silver	<0.025		0.0500	0.0523		mg/L		105	75 - 125
Zinc	0.34	J B	0.500	0.863		mg/L		104	75 - 125

Lab Sample ID: 500-150990-20 MS
Matrix: Solid
Analysis Batch: 449686

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: TCLP
Prep Batch: 449161

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Nickel	0.023	J	0.500	0.446		mg/L		85	75 - 125

Lab Sample ID: 500-150990-20 DU
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: TCLP
Prep Batch: 449161

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.43	J	0.422	J	mg/L		3	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.075	J	0.0726	J	mg/L		3	20
Cadmium	0.0063		0.00625		mg/L		1	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.011	J ^	0.0108	J ^	mg/L		1	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	0.11		0.105		mg/L		2	20
Manganese	1.1		1.07		mg/L		2	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.34	J B	0.331	J	mg/L		3	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-150990-20 DU
Matrix: Solid
Analysis Batch: 449686

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: TCLP
Prep Batch: 449161

Analyte	Sample	Sample	DU DU		Unit	D	RPD	
	Result	Qualifier	Result	Qualifier			RPD	Limit
Nickel	0.023	J	0.0255		mg/L		9	20

Lab Sample ID: LB 500-449027/1-D
Matrix: Solid
Analysis Batch: 449563

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449246

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		09/11/18 15:25	09/12/18 15:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/11/18 15:25	09/12/18 15:51	1
Boron	<0.50		0.50	0.050	mg/L		09/11/18 15:25	09/12/18 15:51	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 15:25	09/12/18 15:51	1
Chromium	<0.025		0.025	0.010	mg/L		09/11/18 15:25	09/12/18 15:51	1
Cobalt	<0.025		0.025	0.010	mg/L		09/11/18 15:25	09/12/18 15:51	1
Iron	<0.40		0.40	0.20	mg/L		09/11/18 15:25	09/12/18 15:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 15:25	09/12/18 15:51	1
Manganese	<0.025		0.025	0.010	mg/L		09/11/18 15:25	09/12/18 15:51	1
Nickel	<0.025		0.025	0.010	mg/L		09/11/18 15:25	09/12/18 15:51	1
Selenium	<0.050		0.050	0.020	mg/L		09/11/18 15:25	09/12/18 15:51	1
Silver	<0.025		0.025	0.010	mg/L		09/11/18 15:25	09/12/18 15:51	1
Zinc	0.0705	J	0.50	0.020	mg/L		09/11/18 15:25	09/12/18 15:51	1

Lab Sample ID: LB 500-449010/1-B
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 449238

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/11/18 15:19	09/12/18 20:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/11/18 15:19	09/12/18 20:51	1
Manganese	<0.025		0.025	0.010	mg/L		09/11/18 15:19	09/12/18 20:51	1

Lab Sample ID: 500-150990-20 MS
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: SPLP East
Prep Batch: 449238

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Cadmium	<0.0050		0.0500	0.0470		mg/L		94	75 - 125
Lead	<0.0075		0.100	0.0979		mg/L		98	75 - 125
Manganese	<0.025		0.500	0.475		mg/L		95	75 - 125

Lab Sample ID: 500-150990-20 DU
Matrix: Solid
Analysis Batch: 449561

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: SPLP East
Prep Batch: 449238

Analyte	Sample	Sample	DU DU		Unit	D	RPD	
	Result	Qualifier	Result	Qualifier			RPD	Limit
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	<0.025		<0.025		mg/L		NC	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-449012/1-B
Matrix: Solid
Analysis Batch: 449563

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 449243

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		09/11/18 15:22	09/12/18 21:47	1

Lab Sample ID: 500-150990-21 MS
Matrix: Solid
Analysis Batch: 449563

Client Sample ID: 2615V-118-B06 (5-10)
Prep Type: SPLP East
Prep Batch: 449243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Manganese	0.035		0.500	0.493		mg/L		92	75 - 125

Lab Sample ID: 500-150990-21 DU
Matrix: Solid
Analysis Batch: 449563

Client Sample ID: 2615V-118-B06 (5-10)
Prep Type: SPLP East
Prep Batch: 449243

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.035		0.0355		mg/L		2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-449161/2-A
Matrix: Solid
Analysis Batch: 449617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.507		mg/L		101	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LCS 500-449246/2-A
Matrix: Solid
Analysis Batch: 449650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.472		mg/L		94	80 - 120
Thallium	0.100	0.0968		mg/L		97	80 - 120

Lab Sample ID: LB 500-449021/1-B
Matrix: Solid
Analysis Batch: 449617

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449161

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 09:45	09/12/18 18:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 09:45	09/12/18 18:38	1

Lab Sample ID: 500-150990-20 MS
Matrix: Solid
Analysis Batch: 449617

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: TCLP
Prep Batch: 449161

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.590		mg/L		118	75 - 125
Thallium	<0.0020		0.100	0.123		mg/L		123	75 - 125

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-150990-20 DU
Matrix: Solid
Analysis Batch: 449617

Client Sample ID: 2615V-118-B06 (0-5)
Prep Type: TCLP
Prep Batch: 449161

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: LB 500-449027/1-D
Matrix: Solid
Analysis Batch: 449650

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449246

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		09/11/18 15:25	09/13/18 12:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/11/18 15:25	09/13/18 12:11	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-449194/12-A
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449194

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 08:18	1

Lab Sample ID: LCS 500-449194/13-A
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Lab Sample ID: MB 500-449199/12-A
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449199

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 09:51	1

Lab Sample ID: LCS 500-449199/13-A
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Lab Sample ID: LB 500-449027/1-C
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449194

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 08:32	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LB 500-449021/1-C
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 449199

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/11/18 13:10	09/12/18 09:58	1

Lab Sample ID: 500-150990-11 MS
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: 2615V-118-B28 (39-47)
Prep Type: TCLP
Prep Batch: 449199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00108		mg/L		108	75 - 125

Lab Sample ID: 500-150990-11 DU
Matrix: Solid
Analysis Batch: 449426

Client Sample ID: 2615V-118-B28 (39-47)
Prep Type: TCLP
Prep Batch: 449199

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-449458/12-A
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		09/12/18 16:50	09/13/18 11:49	1

Lab Sample ID: LCS 500-449458/13-A
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449458

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.157		mg/Kg		94	80 - 120

Lab Sample ID: MB 500-449462/12-A
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		09/12/18 16:50	09/13/18 13:18	1

Lab Sample ID: LCS 500-449462/13-A
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.150		mg/Kg		90	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-150990-12 MS
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: 2615V-118-B07 (0-5)
Prep Type: Total/NA
Prep Batch: 449462
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.054		0.0932	0.152		mg/Kg	☼	106	75 - 125

Lab Sample ID: 500-150990-12 MSD
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: 2615V-118-B07 (0-5)
Prep Type: Total/NA
Prep Batch: 449462
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.054		0.0927	0.140		mg/Kg	☼	94	75 - 125	8	20

Lab Sample ID: 500-150990-12 DU
Matrix: Solid
Analysis Batch: 449699

Client Sample ID: 2615V-118-B07 (0-5)
Prep Type: Total/NA
Prep Batch: 449462
 %Rec.

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.054		0.0541		mg/Kg	☼	1	20

Method: 9045D - pH

Lab Sample ID: 500-150990-9 DU
Matrix: Solid
Analysis Batch: 449453

Client Sample ID: 2615V-118-B28 (23-31)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.8		8.68		SU		0.8	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B38 (0-3)

Lab Sample ID: 500-150990-1

Date Collected: 09/05/18 09:35

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 20:59	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:20	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 16:50	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 18:45	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:00	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	(Start) 09/12/18 16:50 (End) 09/12/18 13:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449008	09/10/18 14:44	LWN	TAL CHI

Client Sample ID: 2615V-118-B38 (0-3)

Lab Sample ID: 500-150990-1

Date Collected: 09/05/18 09:35

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449814	09/14/18 12:30	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 18:18	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 18:14	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 18:18	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:22	EEN	TAL CHI
Total/NA	Prep	7471B			449458	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 12:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B39 (0-3)

Lab Sample ID: 500-150990-2

Date Collected: 09/05/18 09:45

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B39 (0-3)

Lab Sample ID: 500-150990-2

Date Collected: 09/05/18 09:45

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:03	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:24	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 16:54	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 18:49	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B39 (0-3)

Lab Sample ID: 500-150990-2

Date Collected: 09/05/18 09:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449814	09/14/18 12:57	DJD	TAL CHI
Total/NA	Prep	3541	DL		449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D	DL	5	450323	09/18/18 00:51	GES	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 18:45	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 18:22	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 18:26	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:26	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:22	PFK	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Date Collected: 09/05/18 10:20

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:08	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:28	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 16:58	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 18:53	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:03	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B31 (0-6)

Lab Sample ID: 500-150990-3

Date Collected: 09/05/18 10:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449814	09/14/18 13:23	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450323	09/18/18 01:20	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 18:30	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 18:34	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:30	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:24	PFK	TAL CHI

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:12	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:32	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:02	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 18:57	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B31 (6-12)

Lab Sample ID: 500-150990-4

Date Collected: 09/05/18 10:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 01:23	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 19:11	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 18:38	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 18:42	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:34	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:26	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (0-5)

Lab Sample ID: 500-150990-5

Date Collected: 09/05/18 09:40

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (0-5)

Lab Sample ID: 500-150990-5

Date Collected: 09/05/18 09:40

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Analysis	6010B		1	449561	09/12/18 21:16	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:06	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:00	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:06	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B28 (0-5)

Lab Sample ID: 500-150990-5

Date Collected: 09/05/18 09:40

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 01:49	DJD	TAL CHI
Total/NA	Prep	3541	DL		449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D	DL	5	450323	09/18/18 01:49	GES	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 19:37	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 18:46	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 18:50	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:38	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:28	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (5-10)

Lab Sample ID: 500-150990-6

Date Collected: 09/05/18 09:45

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:20	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (5-10)

Lab Sample ID: 500-150990-6

Date Collected: 09/05/18 09:45

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:10	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:04	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:08	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B28 (5-10)

Lab Sample ID: 500-150990-6

Date Collected: 09/05/18 09:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 02:15	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 20:03	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 19:06	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 19:10	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:42	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:30	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (10-15)

Lab Sample ID: 500-150990-7

Date Collected: 09/05/18 09:50

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:24	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:15	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (10-15)

Lab Sample ID: 500-150990-7

Date Collected: 09/05/18 09:50

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	449617	09/12/18 19:08	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:10	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	(Start) 09/12/18 16:50 (End) 09/12/18 13:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B28 (10-15)

Lab Sample ID: 500-150990-7

Date Collected: 09/05/18 09:50

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 02:41	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 20:29	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 19:14	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 19:18	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:46	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:32	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (15-23)

Lab Sample ID: 500-150990-8

Date Collected: 09/05/18 10:00

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:28	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:19	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:12	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:11	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (15-23)

Lab Sample ID: 500-150990-8

Date Collected: 09/05/18 10:00

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	449453	09/12/18 16:50 (Start) 09/12/18 13:35 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B28 (15-23)

Lab Sample ID: 500-150990-8

Date Collected: 09/05/18 10:00

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 03:07	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 20:56	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 19:22	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 19:26	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 21:58	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:37	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (23-31)

Lab Sample ID: 500-150990-9

Date Collected: 09/05/18 10:05

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:41	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:31	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:23	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:16	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	09/12/18 16:50 (Start) 09/12/18 13:35 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (23-31)

Lab Sample ID: 500-150990-9

Date Collected: 09/05/18 10:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 03:32	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 21:22	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 19:30	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 19:34	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:02	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:38	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (31-39)

Lab Sample ID: 500-150990-10

Date Collected: 09/05/18 10:10

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:45	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:35	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:27	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:18	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	(Start) 09/12/18 16:50 (End) 09/12/18 13:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B28 (31-39)

Lab Sample ID: 500-150990-10

Date Collected: 09/05/18 10:10

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 03:58	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 21:48	GES	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (31-39)

Lab Sample ID: 500-150990-10

Date Collected: 09/05/18 10:10

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 19:38	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 19:42	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:06	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B28 (39-47)

Lab Sample ID: 500-150990-11

Date Collected: 09/05/18 10:15

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:49	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:40	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:31	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:20	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	(Start) 09/12/18 16:50 (End) 09/12/18 13:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B28 (39-47)

Lab Sample ID: 500-150990-11

Date Collected: 09/05/18 10:15

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449814	09/14/18 13:50	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 22:14	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 19:54	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 19:58	JEF	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B28 (39-47)

Lab Sample ID: 500-150990-11

Date Collected: 09/05/18 10:15

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:10	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:42	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (0-5)

Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:53	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:36	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:44	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:34	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:24	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (0-5)

Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 04:49	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450323	09/18/18 02:17	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:02	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 20:06	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (0-5)

Lab Sample ID: 500-150990-12

Date Collected: 09/05/18 11:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	449628	09/12/18 22:14	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:44	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 21:57	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:41	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:48	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:38	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 05:15	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 23:06	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:10	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 20:14	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:18	EEN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)

Lab Sample ID: 500-150990-13

Date Collected: 09/05/18 11:20

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:51	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:02	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:45	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:52	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:42	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 05:41	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 23:32	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:18	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 20:22	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:22	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (5-10)D

Lab Sample ID: 500-150990-14

Date Collected: 09/05/18 11:25

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	449699	09/13/18 13:53	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Date Collected: 09/05/18 11:30

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:06	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 17:56	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:46	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:29	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (10-15)

Lab Sample ID: 500-150990-15

Date Collected: 09/05/18 11:30

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 06:06	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/16/18 23:58	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:26	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 20:30	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:26	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 13:58	PFK	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Date Collected: 09/05/18 11:35

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:10	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 18:00	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:49	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:31	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (15-23)

Lab Sample ID: 500-150990-16

Date Collected: 09/05/18 11:35

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 06:32	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/17/18 00:24	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:42	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 20:46	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:30	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 14:00	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:14	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 18:04	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 19:53	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:36	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453		SMO	TAL CHI
					(Start)	09/12/18 16:50		
					(End)	09/12/18 13:35		
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (23-31)

Lab Sample ID: 500-150990-17

Date Collected: 09/05/18 11:40

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 06:58	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/17/18 00:51	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:50	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 20:54	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:35	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 14:02	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:18	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 18:09	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	449617	09/12/18 19:57	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	(Start) 09/12/18 16:50 (End) 09/12/18 13:35	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (31-39)

Lab Sample ID: 500-150990-18

Date Collected: 09/05/18 11:45

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 07:23	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/17/18 01:17	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 20:58	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 21:02	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:47	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 14:04	PFK	TAL CHI

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:31	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 11:57	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 18:21	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 20:08	FXG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:39	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	09/12/18 16:50 (Start) 09/12/18 13:35 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B07 (39-47)

Lab Sample ID: 500-150990-19

Date Collected: 09/05/18 11:50

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 07:49	DJD	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/17/18 01:43	GES	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449781	09/13/18 21:06	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449781	09/13/18 21:10	JEF	TAL CHI
Total/NA	Prep	3050B			449058	09/11/18 08:10	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449628	09/12/18 22:51	EEN	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 14:05	PFK	TAL CHI

Client Sample ID: 2615V-118-B06 (0-5)

Lab Sample ID: 500-150990-20

Date Collected: 09/05/18 12:05

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449010	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449238	09/11/18 15:19	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449561	09/12/18 22:35	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449686	09/13/18 12:02	JEF	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6010B		1	449561	09/12/18 18:25	EEN	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449161	09/11/18 09:45	SAH	TAL CHI
TCLP	Analysis	6020A		1	449617	09/12/18 20:12	FXG	TAL CHI
TCLP	Leach	1311			449021	09/10/18 14:44	JLC	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B06 (0-5)

Lab Sample ID: 500-150990-20

Date Collected: 09/05/18 12:05

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	7470A			449199	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 10:41	MJG	TAL CHI
Total/NA	Analysis	9045D		1	449453	09/12/18 16:50 (Start) 09/12/18 13:35 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B06 (0-5)

Lab Sample ID: 500-150990-20

Date Collected: 09/05/18 12:05

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 08:15	DJD	TAL CHI
Total/NA	Prep	3541	DL		449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D	DL	5	450323	09/18/18 02:46	GES	TAL CHI
Total/NA	Prep	3541			449570	09/13/18 07:21	JVD	TAL CHI
Total/NA	Analysis	8270D		1	450107	09/17/18 02:09	GES	TAL CHI
Total/NA	Prep	3050B			449069	09/11/18 08:23	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449629	09/13/18 00:52	EEN	TAL CHI
Total/NA	Prep	3050B			449069	09/11/18 08:23	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449791	09/13/18 17:38	JEF	TAL CHI
Total/NA	Prep	3050B			449069	09/11/18 08:23	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449791	09/13/18 17:42	JEF	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 14:07	PFK	TAL CHI

Client Sample ID: 2615V-118-B06 (5-10)

Lab Sample ID: 500-150990-21

Date Collected: 09/05/18 12:10

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			449012	09/10/18 13:48	JLC	TAL CHI
SPLP East	Prep	3010A			449243	09/11/18 15:22	BDE	TAL CHI
SPLP East	Analysis	6010B		1	449563	09/12/18 21:56	EEN	TAL CHI
TCLP	Leach	1311			449027	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449246	09/11/18 15:25	BDE	TAL CHI
TCLP	Analysis	6010B		1	449563	09/12/18 16:12	EEN	TAL CHI
TCLP	Leach	1311			449027	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	3010A			449246	09/11/18 15:25	BDE	TAL CHI
TCLP	Analysis	6020A		1	449650	09/13/18 12:19	FXG	TAL CHI
TCLP	Leach	1311			449027	09/10/18 14:44	JLC	TAL CHI
TCLP	Prep	7470A			449194	09/11/18 13:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	449426	09/12/18 08:57	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Client Sample ID: 2615V-118-B06 (5-10)

Lab Sample ID: 500-150990-21

Date Collected: 09/05/18 12:10

Matrix: Solid

Date Received: 09/05/18 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	449453	09/12/18 17:03 (Start) 09/12/18 16:50 (End)	SMO	TAL CHI
Total/NA	Analysis	Moisture		1	449023	09/10/18 15:06	LWN	TAL CHI

Client Sample ID: 2615V-118-B06 (5-10)

Lab Sample ID: 500-150990-21

Date Collected: 09/05/18 12:10

Matrix: Solid

Date Received: 09/05/18 16:15

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			449397	09/06/18 14:00	DJD	TAL CHI
Total/NA	Analysis	8260B		1	449663	09/14/18 08:42	DJD	TAL CHI
Total/NA	Prep	3541			449399	09/12/18 10:03	JVD	TAL CHI
Total/NA	Analysis	8270D		1	449830	09/14/18 16:49	GES	TAL CHI
Total/NA	Prep	3050B			449069	09/11/18 08:23	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449629	09/13/18 00:56	EEN	TAL CHI
Total/NA	Prep	3050B			449069	09/11/18 08:23	SAH	TAL CHI
Total/NA	Analysis	6010B		1	449791	09/13/18 17:46	JEF	TAL CHI
Total/NA	Prep	3050B			449069	09/11/18 08:23	SAH	TAL CHI
Total/NA	Analysis	6010B		5	449791	09/13/18 17:58	JEF	TAL CHI
Total/NA	Prep	7471B			449462	09/12/18 16:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	449699	09/13/18 14:09	PFK	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-150990-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-150990
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: 5.3, 3.2, 5.4

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
Project Name		Lab Project #		Sampling		Date		Time		Matrix	
Project Location/State		Lab PM		# of Containers		Date		Time		Matrix	
Sampler		Lab PM		Date		Time		Matrix		Matrix	
E + C											
FA/ 90/94 (1-90/94)											
Cook County/IL		D. Wright									
E. Bender											
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SUCC	TCRP SPEC	Et+I Metal	PH
1		2615V-118-B38(0-3)	9/5/18	0935	2	S	x	x	x	x	x
2		2615V-118-B39(0-3)	9/5/18	0945	2	S	x	x	x	x	x
3		2615V-118-B31(0-6)	9/5/18	1020	2	S	x	x	x	x	x
4		2615V-118-B31(6-12)	9/5/18	1030	2	S	x	x	x	x	x

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other



500-150990 COC

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By:	Company: ENG	Date: 9/5/18	Time: 1530	Received By:	Company: TA	Date: 9/5/18	Time: 1530
Relinquished By:	Company: TA	Date: 9/5/18	Time: 1615	Received By:	Company: TA	Date: 09/05/18	Time: 1615
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500750990
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 3.2, 5.3, 5.4

Client <u>E+E</u>		Client Project # <u>1009341.004302</u>		Preservative		Parameter		Matrix		Preservative Key		
Project Name <u>176-001-WO43A</u>				Parameter		Matrix		Matrix		Preservative Key		
Project Location/State <u>Chicago, IL</u>				Lab Project #		Matrix		Matrix		Preservative Key		
Sampler				Lab PM <u>R. Wright</u>		Matrix		Matrix		Preservative Key		
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total/Trace Metals	PH	Percent Solids	Comments
			Date	Time								
5		2615V-118-B28(0-5)	9/5/18	0940	4	S	X	X	X	X	X	
6		2615V-118-B28(5-10)	9/5/18	0945	4	S	X	X	X	X	X	
7		2615V-118-B28(10-15)	9/5/18	0950	4	S	X	X	X	X	X	
8		2615V-118-B28(15-23)	9/5/18	1000	4	S	X	X	X	X	X	
9		2615V-118-B28(23-31)	9/5/18	1005	4	S	X	X	X	X	X	
10		2615V-118-B28(31-39)	9/5/18	1010	4	S	X	X	X	X	X	
11		2615V-118-B28(39-47)	9/5/18	1015	4	S	X	X	X	X	X	

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date _____

Relinquished By <u>[Signature]</u>	Company <u>E+E</u>	Date <u>9/5/18</u>	Time <u>1530</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>9/5/18</u>	Time <u>1530</u>
Relinquished By <u>[Signature]</u>	Company <u>TA</u>	Date <u>9/5/18</u>	Time <u>1615</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>09/05/18</u>	Time <u>1615</u>
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____

Lab Courier TA

Shipped _____

Hand Delivered _____

Matrix Key

WW - Wastewater SE - Sediment
W - Water SO - Soil
S - Soil L - Leachate
SL - Sludge WI - Wipe
MS - Miscellaneous DW - Drinking Water
OL - Oil O - Other
A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-150990
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: 54.53.32

Client		Client Project #		Preservative		Parameter												Preservative Key	
E+E		1009341.0043.02																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		Matrix												Comments	
176-001-W043A				Date Time		# of Containers Matrix													
Project Location/State		Lab PM																	
Chicago, IL		R. Wright						VOC		SVOC		Total/TCLP Metals		pH		Percent Solids			
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix													
12		2615V-118-B07(0-5)	9/5/18	1105	4	S	X	X	X	X	X								
13		2615V-118-B07(5-10)	9/5/18	1120	4	S	X	X	X	X	X								
14		2615V-118-B07(5-10)D	9/5/18	1125	4	S	X	X	X	X	X								
15		2615V-118-B07(10-15)	9/5/18	1130	4	S	X	X	X	X	X								
16		2615V-118-B07(15-23)	9/5/18	1135	4	S	X	X	X	X	X								
17		2615V-118-B07(23-31)	9/5/18	1140	4	S	X	X	X	X	X								
18		2615V-118-B07(31-39)	9/5/18	1145	4	S	X	X	X	X	X								
19		2615V-118-B07(39-47)	9/5/18	1150	4	S	X	X	X	X	X								
20		2615V-118-B06(0-5)	9/5/18	1205	4	S	X	X	X	X	X								
21		2615V-118-B06(5-16)	9/5/18	1210	4	S	X	X	X	X	X								

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date

Relinquished By <i>J. Hughes</i>	Company E+E	Date 9/5/18	Time 1530	Received By <i>[Signature]</i>	Company TA	Date 9/5/18	Time 1530
Relinquished By <i>[Signature]</i>	Company TA	Date 9/5/18	Time 1615	Received By <i>[Signature]</i>	Company TA/MS	Date 09/15/18	Time 1615
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-150990-1

Login Number: 150990

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2, 5.3, 5.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-151344-1
Client Project/Site: IDOT - 176-001-WO043A

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
9/25/2018 3:55:42 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Job ID: 500-151344-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-151344-1

Receipt

The samples were received on 9/12/2018 7:42 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.6° C, 4.4° C and 5.6° C.

GC/MS VOA

Method(s) 8260B: The following analyte recovered outside control limits for the LCS and/or LCSD associated with 450699: Chloroethane, Chloromethane, 2-Hexanone, and 1,1,2,2-Tetrachloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: The following sample contained one acid surrogate outside acceptance limits: (LCS 500-450787/2-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Two acid surrogate recoveries for the following sample were outside the upper control limit: (MB 500-450787/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for four analytes. The associated LCS was within limits. Data has been qualified and reported. (500-151344-D-19-H MS) and (500-151344-D-19-I MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The interference check standard solution (ICSA) associated with Analytical batch 500-450844 had results for Cobalt above the reporting limit (RL). Associated samples 2615V-118-B09 (10-15) (500-151344-3), 2615V-118-B09 (23-31) (500-151344-5), 2615V-118-B09 (31-39) (500-151344-6), 2615V-118-B09 (39-47) (500-151344-7), 2615V-118-B35 (31-39) (500-151344-13), 2615V-118-B35 (39-47) (500-151344-14), 2615V-118-B12 (0-5) (500-151344-15), 2615V-118-B12 (10-15) (500-151344-18), 2615V-118-B12 (15-23) (500-151344-19) and 2615V-118-B12 (23-31) (500-151344-20) were non-detects for Cobalt, therefore the data has been reported.

Method(s) 6020A: The method blank for preparation batch 500-450138 and 500-450391 contained Antimony above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

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Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.018	J	0.037	0.0057	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.027	J	0.074	0.0068	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (0-5) (Continued)

Lab Sample ID: 500-151344-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.019	J	0.037	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.016	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.22		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.035	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.21		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.21		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.10		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.12		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.14		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.046		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.10		0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.045		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.014	J	0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.052		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	63000	B	53	9.0	mg/Kg	5	☼	6010B	Total/NA
Chromium	15		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	33	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	55		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	30		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.33	J	0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	0.20	J	0.27	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	290		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.55		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	79		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.37	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.010		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	2.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.085	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.050		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.019	J	0.021	0.0092	mg/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (5-10) (Continued)

Lab Sample ID: 500-151344-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.037	J	0.038	0.0059	mg/Kg	1	☼	☼	8270D	Total/NA
2-Methylnaphthalene	0.033	J	0.077	0.0070	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthylene	0.039		0.038	0.0050	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthene	0.042		0.038	0.0069	mg/Kg	1	☼	☼	8270D	Total/NA
Fluorene	0.054		0.038	0.0054	mg/Kg	1	☼	☼	8270D	Total/NA
Phenanthrene	0.62		0.038	0.0053	mg/Kg	1	☼	☼	8270D	Total/NA
Anthracene	0.13		0.038	0.0064	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.78		0.038	0.0071	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.71		0.038	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.36		0.038	0.0051	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.36		0.038	0.010	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.41		0.038	0.0083	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.15		0.038	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]pyrene	0.32		0.038	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.13		0.038	0.0099	mg/Kg	1	☼	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.041		0.038	0.0074	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.038	0.012	mg/Kg	1	☼	☼	8270D	Total/NA
Antimony	0.27	J	1.2	0.23	mg/Kg	1	☼	☼	6010B	Total/NA
Arsenic	7.7		0.59	0.20	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	630		0.59	0.067	mg/Kg	1	☼	☼	6010B	Total/NA
Beryllium	0.78		0.23	0.055	mg/Kg	1	☼	☼	6010B	Total/NA
Boron	20		2.9	0.27	mg/Kg	1	☼	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.021	mg/Kg	1	☼	☼	6010B	Total/NA
Calcium	57000	B	59	9.9	mg/Kg	5	☼	☼	6010B	Total/NA
Chromium	23		0.59	0.29	mg/Kg	1	☼	☼	6010B	Total/NA
Cobalt	12		0.29	0.077	mg/Kg	1	☼	☼	6010B	Total/NA
Copper	68	B	0.59	0.16	mg/Kg	1	☼	☼	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	☼	☼	6010B	Total/NA
Lead	42		0.29	0.14	mg/Kg	1	☼	☼	6010B	Total/NA
Magnesium	24000		5.9	2.9	mg/Kg	1	☼	☼	6010B	Total/NA
Manganese	320		0.59	0.085	mg/Kg	1	☼	☼	6010B	Total/NA
Nickel	32		0.59	0.17	mg/Kg	1	☼	☼	6010B	Total/NA
Potassium	3500		29	10	mg/Kg	1	☼	☼	6010B	Total/NA
Selenium	0.42	J	0.59	0.34	mg/Kg	1	☼	☼	6010B	Total/NA
Silver	0.19	J	0.29	0.076	mg/Kg	1	☼	☼	6010B	Total/NA
Sodium	220		59	8.7	mg/Kg	1	☼	☼	6010B	Total/NA
Thallium	0.53	J	0.59	0.29	mg/Kg	1	☼	☼	6010B	Total/NA
Vanadium	22		0.29	0.069	mg/Kg	1	☼	☼	6010B	Total/NA
Zinc	78		1.2	0.51	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	0.40	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1			6010B	TCLP
Cobalt	0.029		0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.014		0.0075	0.0075	mg/L	1			6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.062		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.075	J B	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.027		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.24		0.019	0.0064	mg/Kg	1	☼	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1			9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.021	J	0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA	
2-Methylnaphthalene	0.036	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA	
Acenaphthene	0.015	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA	
Fluorene	0.011	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA	
N-Nitrosodiphenylamine	0.051	J	0.20	0.047	mg/Kg	1	☼	8270D	Total/NA	
Phenanthrene	0.16		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA	
Anthracene	0.016	J	0.040	0.0067	mg/Kg	1	☼	8270D	Total/NA	
Fluoranthene	0.094		0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA	
Pyrene	0.11		0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]anthracene	0.047		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA	
Chrysene	0.060		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA	
Benzo[b]fluoranthene	0.058		0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA	
Benzo[k]fluoranthene	0.025	J	0.040	0.012	mg/Kg	1	☼	8270D	Total/NA	
Benzo[a]pyrene	0.035	J	0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA	
Indeno[1,2,3-cd]pyrene	0.019	J	0.040	0.010	mg/Kg	1	☼	8270D	Total/NA	
Benzo[g,h,i]perylene	0.024	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA	
Arsenic	8.6		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA	
Barium	37		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA	
Beryllium	0.80		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA	
Boron	22		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA	
Cadmium	0.088	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA	
Calcium	56000	B	58	9.8	mg/Kg	5	☼	6010B	Total/NA	
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA	
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA	
Copper	34	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA	
Iron	20000		12	6.0	mg/Kg	1	☼	6010B	Total/NA	
Lead	20		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA	
Magnesium	25000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA	
Manganese	330		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA	
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA	
Potassium	3700		29	10	mg/Kg	1	☼	6010B	Total/NA	
Selenium	0.69		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA	
Silver	0.20	J	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA	
Sodium	200		58	8.6	mg/Kg	1	☼	6010B	Total/NA	
Thallium	0.66		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA	
Vanadium	23		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA	
Zinc	52		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA	
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP	
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP	
Cobalt	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP	
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP	
Nickel	0.059		0.025	0.010	mg/L	1		6010B	TCLP	
Zinc	0.081	J B	0.50	0.020	mg/L	1		6010B	TCLP	
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East	
Mercury	0.040		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA	
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA	

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (15-23) (Continued)

Lab Sample ID: 500-151344-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.034	J	0.039	0.0060	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.031	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.039		0.039	0.0051	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.048		0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.063		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.70		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.16		0.039	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.93		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.91		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.44		0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.46		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.58		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.19		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.40		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.15		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.045		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.15		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.31	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.4		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.78		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	56	9.5	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	41	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	41		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3500		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J	0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.18	J	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.65		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	71		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.011		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.060	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.027		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.10		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.033	J	0.039	0.0060	mg/Kg	1	☼	☼	8270D	Total/NA
2-Methylnaphthalene	0.028	J	0.079	0.0072	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthylene	0.028	J	0.039	0.0052	mg/Kg	1	☼	☼	8270D	Total/NA
Acenaphthene	0.052		0.039	0.0070	mg/Kg	1	☼	☼	8270D	Total/NA
Fluorene	0.059		0.039	0.0055	mg/Kg	1	☼	☼	8270D	Total/NA
Phenanthrene	0.63		0.039	0.0054	mg/Kg	1	☼	☼	8270D	Total/NA
Anthracene	0.13		0.039	0.0065	mg/Kg	1	☼	☼	8270D	Total/NA
Fluoranthene	0.80		0.039	0.0072	mg/Kg	1	☼	☼	8270D	Total/NA
Pyrene	0.77		0.039	0.0078	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]anthracene	0.39		0.039	0.0053	mg/Kg	1	☼	☼	8270D	Total/NA
Chrysene	0.40		0.039	0.011	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.49		0.039	0.0084	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.16		0.039	0.012	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[a]pyrene	0.36		0.039	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.039	0.010	mg/Kg	1	☼	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.038	J	0.039	0.0076	mg/Kg	1	☼	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.13		0.039	0.013	mg/Kg	1	☼	☼	8270D	Total/NA
Arsenic	8.0		0.57	0.20	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	44		0.57	0.065	mg/Kg	1	☼	☼	6010B	Total/NA
Beryllium	0.79		0.23	0.053	mg/Kg	1	☼	☼	6010B	Total/NA
Boron	21		2.9	0.27	mg/Kg	1	☼	☼	6010B	Total/NA
Cadmium	0.061	J B	0.11	0.021	mg/Kg	1	☼	☼	6010B	Total/NA
Calcium	55000	B	57	9.7	mg/Kg	5	☼	☼	6010B	Total/NA
Chromium	18		0.57	0.28	mg/Kg	1	☼	☼	6010B	Total/NA
Cobalt	15		0.29	0.075	mg/Kg	1	☼	☼	6010B	Total/NA
Copper	29	B	0.57	0.16	mg/Kg	1	☼	☼	6010B	Total/NA
Iron	20000		11	5.9	mg/Kg	1	☼	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	☼	6010B	Total/NA
Magnesium	23000		5.7	2.8	mg/Kg	1	☼	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	☼	6010B	Total/NA
Nickel	36		0.57	0.17	mg/Kg	1	☼	☼	6010B	Total/NA
Potassium	3800		29	10	mg/Kg	1	☼	☼	6010B	Total/NA
Selenium	0.71		0.57	0.34	mg/Kg	1	☼	☼	6010B	Total/NA
Silver	0.17	J	0.29	0.074	mg/Kg	1	☼	☼	6010B	Total/NA
Sodium	240		57	8.5	mg/Kg	1	☼	☼	6010B	Total/NA
Thallium	0.70		0.57	0.28	mg/Kg	1	☼	☼	6010B	Total/NA
Vanadium	23		0.29	0.067	mg/Kg	1	☼	☼	6010B	Total/NA
Zinc	52		1.1	0.50	mg/Kg	1	☼	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1			6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1			6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1			6010B	TCLP
Lead	0.0076		0.0075	0.0075	mg/L	1			6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1			6010B	TCLP
Nickel	0.061		0.025	0.010	mg/L	1			6010B	TCLP
Zinc	0.16	J B	0.50	0.020	mg/L	1			6010B	TCLP
Manganese	0.027		0.025	0.010	mg/L	1			6010B	SPLP East
Mercury	0.026		0.019	0.0063	mg/Kg	1	☼	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1			9045D	Total/NA

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (31-39) (Continued)

Lab Sample ID: 500-151344-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.034	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.068		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.013	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.0		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.81		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	23		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000	B	56	9.5	mg/Kg	5	☼	6010B	Total/NA
Chromium	19		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	26	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	250		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.55	J	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.073	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.068		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.031	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0074	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0061	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.094		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.29	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.1		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.80		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	20		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.079	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	62	10	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.62	0.30	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (39-47) (Continued)

Lab Sample ID: 500-151344-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	29	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.62	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		31	11	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.69		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.14	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.021	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.042		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0077	J	0.039	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.067		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.066		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.034	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.044		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.057		0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.027	J	0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.037	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.018	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.019	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.0		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	120		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	7.3		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	10000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	19		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	21	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	32		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6300		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.57	0.082	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (0-5) (Continued)

Lab Sample ID: 500-151344-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	20		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.42	J	0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.19	J	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	130		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.50	J	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	27		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	72		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.45		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.094	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.056		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.027	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.20		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.031	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.9		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	27		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.088	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	60000	B	57	9.7	mg/Kg	5	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	36	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	460		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	0.17	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.42	J	0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.084		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.085	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10) (Continued)

Lab Sample ID: 500-151344-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.027		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.012	J	0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.021	J	0.036	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0091	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.024	J	0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.033	J	0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.2		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	25		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.092	J B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	69000	B	54	9.1	mg/Kg	5	☼	6010B	Total/NA
Chromium	13		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	32	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	450		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Silver	0.13	J	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		54	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.47	J	0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.31	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.092	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.082		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.036	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.039		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.058	J	0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.027	J	0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.012	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.034	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.2		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (10-15) (Continued)

Lab Sample ID: 500-151344-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	33		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	65000	B	58	9.9	mg/Kg	5	☼	6010B	Total/NA
Chromium	15		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	29000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	0.13	J	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		58	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.46	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.044	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.028		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.034	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.011	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0082	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.025	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.7		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.061	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	61	10	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	32	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (15-23) (Continued)

Lab Sample ID: 500-151344-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	24000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		30	11	mg/Kg	1	☼	6010B	Total/NA
Silver	0.19	J	0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.59	J	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.045		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.012	J	0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.031	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.012	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0098	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.026	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.023	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.063	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	58	9.9	mg/Kg	5	☼	6010B	Total/NA
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	27	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.19	J	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.50	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (23-31) (Continued)

Lab Sample ID: 500-151344-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J ^	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.042	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.099		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.048	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.012	J	0.039	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.012	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0083	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.31	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.72		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	22		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	63000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3600		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.64		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	0.27	J	0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	220		61	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.73		0.61	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.083	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.066	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.014	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.010	J	0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.036	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.035	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.028	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.43	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.2		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.57	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	71000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.57	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.37	J	0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.29		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.57		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.028		0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-151344-8	2615V-118-B35 (0-5)	Solid	09/12/18 10:15	09/12/18 19:42
500-151344-9	2615V-118-B35 (5-10)	Solid	09/12/18 10:20	09/12/18 19:42
500-151344-10	2615V-118-B35 (10-15)	Solid	09/12/18 10:25	09/12/18 19:42
500-151344-11	2615V-118-B35 (15-23)	Solid	09/12/18 10:30	09/12/18 19:42
500-151344-12	2615V-118-B35 (23-31)	Solid	09/12/18 10:35	09/12/18 19:42
500-151344-13	2615V-118-B35 (31-39)	Solid	09/12/18 10:45	09/12/18 19:42
500-151344-14	2615V-118-B35 (39-47)	Solid	09/12/18 10:55	09/12/18 19:42
500-151344-15	2615V-118-B12 (0-5)	Solid	09/12/18 11:15	09/12/18 19:42
500-151344-16	2615V-118-B12 (5-10)	Solid	09/12/18 11:20	09/12/18 19:42
500-151344-17	2615V-118-B12 (5-10) D	Solid	09/12/18 11:20	09/12/18 19:42
500-151344-18	2615V-118-B12 (10-15)	Solid	09/12/18 11:25	09/12/18 19:42
500-151344-19	2615V-118-B12 (15-23)	Solid	09/12/18 11:30	09/12/18 19:42
500-151344-20	2615V-118-B12 (23-31)	Solid	09/12/18 11:35	09/12/18 19:42
500-151344-21	2615V-118-B12 (31-39)	Solid	09/12/18 11:45	09/12/18 19:42
500-151344-22	2615V-118-B12 (39-47)	Solid	09/12/18 11:55	09/12/18 19:42

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131	09/12/18 20:20	09/19/18 19:21	1
Dibromofluoromethane	114		75 - 126	09/12/18 20:20	09/19/18 19:21	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	09/12/18 20:20	09/19/18 19:21	1
Toluene-d8 (Surr)	99		75 - 124	09/12/18 20:20	09/19/18 19:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 88.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Naphthalene	0.018	J	0.037	0.0057	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2-Methylnaphthalene	0.027	J	0.074	0.0068	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Acenaphthene	0.019	J	0.037	0.0066	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Fluorene	0.016	J	0.037	0.0052	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Hexachlorobenzene	<0.074		0.074	0.0086	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Phenanthrene	0.22		0.037	0.0051	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Anthracene	0.035	J	0.037	0.0062	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Fluoranthene	0.21		0.037	0.0068	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Pyrene	0.21		0.037	0.0073	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Benzo[a]anthracene	0.10		0.037	0.0050	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 88.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.12		0.037	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Benzo[b]fluoranthene	0.14		0.037	0.0080	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Benzo[k]fluoranthene	0.046		0.037	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Benzo[a]pyrene	0.10		0.037	0.0071	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Indeno[1,2,3-cd]pyrene	0.045		0.037	0.0096	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Dibenz(a,h)anthracene	0.014	J	0.037	0.0071	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Benzo[g,h,i]perylene	0.052		0.037	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 12:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	110		46 - 133				09/20/18 07:45	09/23/18 12:59	1
Phenol-d5	103		46 - 125				09/20/18 07:45	09/23/18 12:59	1
Nitrobenzene-d5	92		41 - 120				09/20/18 07:45	09/23/18 12:59	1
2-Fluorobiphenyl	102		44 - 121				09/20/18 07:45	09/23/18 12:59	1
2,4,6-Tribromophenol	78		25 - 139				09/20/18 07:45	09/23/18 12:59	1
Terphenyl-d14	98		35 - 160				09/20/18 07:45	09/23/18 12:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.25	J	1.1	0.21	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Arsenic	7.3		0.53	0.18	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Barium	45		0.53	0.061	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Beryllium	0.68		0.21	0.050	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Boron	17		2.7	0.25	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Cadmium	0.19	B	0.11	0.019	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Calcium	63000	B	53	9.0	mg/Kg	☼	09/18/18 08:03	09/21/18 15:30	5
Chromium	15		0.53	0.26	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Cobalt	12		0.27	0.070	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Copper	33	B	0.53	0.15	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Iron	17000		11	5.5	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Lead	55		0.27	0.12	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Magnesium	28000		5.3	2.6	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Manganese	290		0.53	0.077	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Nickel	30		0.53	0.15	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Potassium	2800		27	9.4	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Selenium	0.33	J	0.53	0.31	mg/Kg	☼	09/18/18 08:03	09/21/18 15:25	1
Silver	0.20	J	0.27	0.068	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Sodium	290		53	7.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Thallium	0.55		0.53	0.26	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Vanadium	19		0.27	0.063	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1
Zinc	79		1.1	0.47	mg/Kg	☼	09/18/18 08:03	09/20/18 05:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.37	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:24	1
Boron	0.11	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 88.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:24	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:24	1
Cobalt	0.032		0.025	0.010	mg/L		09/18/18 07:44	09/21/18 02:20	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:24	1
Lead	0.010		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:24	1
Manganese	2.9		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:24	1
Nickel	0.054		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:24	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:24	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:24	1
Zinc	0.085	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:24	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:37	09/18/18 20:29	1
Manganese	<0.025		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:29	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.018	0.0059	mg/Kg	☼	09/19/18 16:36	09/20/18 13:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.20	0.20	SU			09/20/18 11:16	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.019	J	0.021	0.0092	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
2-Butanone (MEK)	<0.0053		0.0053	0.0023	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Carbon tetrachloride	<0.0021		0.0021	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,2-Dichloroethane	<0.0053		0.0053	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,1-Dichloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,3-Dichloropropane, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00094	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00091	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Vinyl acetate	<0.0053		0.0053	0.0018	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Vinyl chloride	<0.0021		0.0021	0.00094	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1
Xylenes, Total	<0.0042		0.0042	0.00068	mg/Kg	☼	09/12/18 20:20	09/19/18 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 131	09/12/18 20:20	09/19/18 16:41	1
Dibromofluoromethane	105		75 - 126	09/12/18 20:20	09/19/18 16:41	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	09/12/18 20:20	09/19/18 16:41	1
Toluene-d8 (Surr)	100		75 - 124	09/12/18 20:20	09/19/18 16:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Naphthalene	0.037	J	0.038	0.0059	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2-Methylnaphthalene	0.033	J	0.077	0.0070	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Acenaphthylene	0.039		0.038	0.0050	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Acenaphthene	0.042		0.038	0.0069	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Fluorene	0.054		0.038	0.0054	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Phenanthrene	0.62		0.038	0.0053	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Anthracene	0.13		0.038	0.0064	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Fluoranthene	0.78		0.038	0.0071	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Pyrene	0.71		0.038	0.0076	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Benzo[a]anthracene	0.36		0.038	0.0051	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.36		0.038	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Benzo[b]fluoranthene	0.41		0.038	0.0083	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Benzo[k]fluoranthene	0.15		0.038	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Benzo[a]pyrene	0.32		0.038	0.0074	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Indeno[1,2,3-cd]pyrene	0.13		0.038	0.0099	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Dibenz(a,h)anthracene	0.041		0.038	0.0074	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Benzo[g,h,i]perylene	0.12		0.038	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 13:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	117		46 - 133				09/20/18 07:45	09/23/18 13:25	1
Phenol-d5	109		46 - 125				09/20/18 07:45	09/23/18 13:25	1
Nitrobenzene-d5	98		41 - 120				09/20/18 07:45	09/23/18 13:25	1
2-Fluorobiphenyl	107		44 - 121				09/20/18 07:45	09/23/18 13:25	1
2,4,6-Tribromophenol	80		25 - 139				09/20/18 07:45	09/23/18 13:25	1
Terphenyl-d14	99		35 - 160				09/20/18 07:45	09/23/18 13:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J	1.2	0.23	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Arsenic	7.7		0.59	0.20	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Barium	630		0.59	0.067	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Beryllium	0.78		0.23	0.055	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Boron	20		2.9	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Calcium	57000	B	59	9.9	mg/Kg	☼	09/18/18 08:03	09/21/18 15:38	5
Chromium	23		0.59	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Cobalt	12		0.29	0.077	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Copper	68	B	0.59	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Iron	19000		12	6.1	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Lead	42		0.29	0.14	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Magnesium	24000		5.9	2.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Manganese	320		0.59	0.085	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Nickel	32		0.59	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Potassium	3500		29	10	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Selenium	0.42	J	0.59	0.34	mg/Kg	☼	09/18/18 08:03	09/21/18 15:33	1
Silver	0.19	J	0.29	0.076	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Sodium	220		59	8.7	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Thallium	0.53	J	0.59	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Vanadium	22		0.29	0.069	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1
Zinc	78		1.2	0.51	mg/Kg	☼	09/18/18 08:03	09/20/18 05:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.40	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:29	1
Boron	0.12	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:29	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Chromium	<0.025		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Cobalt	0.029		0.025	0.010	mg/L	-	09/18/18 07:44	09/21/18 02:25	1
Iron	<0.40		0.40	0.20	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Lead	0.014		0.0075	0.0075	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Manganese	2.4		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Nickel	0.062		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Selenium	<0.050		0.050	0.020	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Silver	<0.025		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 20:29	1
Zinc	0.075	J B	0.50	0.020	mg/L	-	09/18/18 07:44	09/19/18 20:29	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L	-	09/18/18 07:37	09/18/18 20:33	1
Manganese	0.027		0.025	0.010	mg/L	-	09/18/18 07:37	09/18/18 20:33	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	09/18/18 07:44	09/19/18 02:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	09/18/18 07:44	09/19/18 02:33	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	09/18/18 11:12	09/19/18 08:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.019	0.0064	mg/Kg	☼	09/19/18 16:36	09/20/18 13:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.20	0.20	SU	-		09/20/18 11:19	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 131	09/12/18 20:20	09/19/18 17:06	1
Dibromofluoromethane	106		75 - 126	09/12/18 20:20	09/19/18 17:06	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/12/18 20:20	09/19/18 17:06	1
Toluene-d8 (Surr)	100		75 - 124	09/12/18 20:20	09/19/18 17:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Naphthalene	0.021	J	0.040	0.0062	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2-Methylnaphthalene	0.036	J	0.081	0.0074	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Acenaphthene	0.015	J	0.040	0.0072	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Fluorene	0.011	J	0.040	0.0056	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
N-Nitrosodiphenylamine	0.051	J	0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Phenanthrene	0.16		0.040	0.0056	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Anthracene	0.016	J	0.040	0.0067	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Fluoranthene	0.094		0.040	0.0074	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Pyrene	0.11		0.040	0.0080	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Benzo[a]anthracene	0.047		0.040	0.0054	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.060		0.040	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Benzo[b]fluoranthene	0.058		0.040	0.0087	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Benzo[k]fluoranthene	0.025 J		0.040	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Benzo[a]pyrene	0.035 J		0.040	0.0078	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Indeno[1,2,3-cd]pyrene	0.019 J		0.040	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Benzo[g,h,i]perylene	0.024 J		0.040	0.013	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 13:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		46 - 133				09/20/18 07:45	09/23/18 13:50	1
Phenol-d5	104		46 - 125				09/20/18 07:45	09/23/18 13:50	1
Nitrobenzene-d5	96		41 - 120				09/20/18 07:45	09/23/18 13:50	1
2-Fluorobiphenyl	104		44 - 121				09/20/18 07:45	09/23/18 13:50	1
2,4,6-Tribromophenol	70		25 - 139				09/20/18 07:45	09/23/18 13:50	1
Terphenyl-d14	101		35 - 160				09/20/18 07:45	09/23/18 13:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Arsenic	8.6		0.58	0.20	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Barium	37		0.58	0.066	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Beryllium	0.80		0.23	0.054	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Boron	22		2.9	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Cadmium	0.088 J B		0.12	0.021	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Calcium	56000 B		58	9.8	mg/Kg	☼	09/18/18 08:03	09/21/18 15:46	5
Chromium	17		0.58	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Cobalt	14		0.29	0.076	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Copper	34 B		0.58	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Iron	20000		12	6.0	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Lead	20		0.29	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Magnesium	25000		5.8	2.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Manganese	330		0.58	0.084	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Nickel	36		0.58	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Potassium	3700		29	10	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Selenium	0.69		0.58	0.34	mg/Kg	☼	09/18/18 08:03	09/21/18 15:41	1
Silver	0.20 J		0.29	0.075	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Sodium	200		58	8.6	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Thallium	0.66		0.58	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Vanadium	23		0.29	0.068	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1
Zinc	52		1.2	0.51	mg/Kg	☼	09/18/18 08:03	09/20/18 05:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:33	1
Boron	0.11 J		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:33	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:33	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:33	1
Cobalt	0.022	J	0.025	0.010	mg/L		09/18/18 07:44	09/21/18 02:29	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:33	1
Manganese	2.0		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:33	1
Nickel	0.059		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:33	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:33	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:33	1
Zinc	0.081	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.025		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:37	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.018	0.0060	mg/Kg	☼	09/19/18 16:36	09/20/18 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.20	0.20	SU			09/20/18 11:21	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		75 - 131	09/12/18 20:20	09/19/18 17:31	1
Dibromofluoromethane	104		75 - 126	09/12/18 20:20	09/19/18 17:31	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	09/12/18 20:20	09/19/18 17:31	1
Toluene-d8 (Surr)	101		75 - 124	09/12/18 20:20	09/19/18 17:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.086	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Naphthalene	0.034	J	0.039	0.0060	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2-Methylnaphthalene	0.031	J	0.078	0.0071	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Acenaphthylene	0.039		0.039	0.0051	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Acenaphthene	0.048		0.039	0.0070	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Fluorene	0.063		0.039	0.0055	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Phenanthrene	0.70		0.039	0.0054	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Anthracene	0.16		0.039	0.0065	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Fluoranthene	0.93		0.039	0.0072	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Pyrene	0.91		0.039	0.0077	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Benzo[a]anthracene	0.44		0.039	0.0052	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.46		0.039	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Benzo[b]fluoranthene	0.58		0.039	0.0084	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Benzo[k]fluoranthene	0.19		0.039	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Benzo[a]pyrene	0.40		0.039	0.0075	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Indeno[1,2,3-cd]pyrene	0.15		0.039	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Dibenz(a,h)anthracene	0.045		0.039	0.0075	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Benzo[g,h,i]perylene	0.15		0.039	0.013	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	09/20/18 07:45	09/23/18 14:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		46 - 133				09/20/18 07:45	09/23/18 14:16	1
Phenol-d5	105		46 - 125				09/20/18 07:45	09/23/18 14:16	1
Nitrobenzene-d5	92		41 - 120				09/20/18 07:45	09/23/18 14:16	1
2-Fluorobiphenyl	102		44 - 121				09/20/18 07:45	09/23/18 14:16	1
2,4,6-Tribromophenol	75		25 - 139				09/20/18 07:45	09/23/18 14:16	1
Terphenyl-d14	96		35 - 160				09/20/18 07:45	09/23/18 14:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	1.1	0.22	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Arsenic	7.4		0.56	0.19	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Barium	45		0.56	0.064	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Beryllium	0.78		0.23	0.053	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Boron	21		2.8	0.26	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Cadmium	0.17	B	0.11	0.020	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Calcium	52000	B	56	9.5	mg/Kg	☼	09/18/18 08:03	09/21/18 15:54	5
Chromium	17		0.56	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Cobalt	14		0.28	0.074	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Copper	41	B	0.56	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Iron	19000		11	5.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Lead	41		0.28	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Magnesium	23000		5.6	2.8	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Manganese	300		0.56	0.082	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Nickel	36		0.56	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Potassium	3500		28	10	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Selenium	0.45	J	0.56	0.33	mg/Kg	☼	09/18/18 08:03	09/21/18 15:50	1
Silver	0.18	J	0.28	0.073	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Sodium	200		56	8.3	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Thallium	0.65		0.56	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Vanadium	22		0.28	0.066	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1
Zinc	71		1.1	0.49	mg/Kg	☼	09/18/18 08:03	09/20/18 05:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:37	1
Boron	0.11	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:37	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:37	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:37	1
Cobalt	0.026		0.025	0.010	mg/L		09/18/18 07:44	09/21/18 02:33	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:37	1
Lead	0.011		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:37	1
Manganese	2.4		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:37	1
Nickel	0.054		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:37	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:37	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:37	1
Zinc	0.060	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:37	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:37	09/18/18 20:41	1
Manganese	0.027		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:41	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:41	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.018	0.0060	mg/Kg	☼	09/19/18 16:36	09/20/18 13:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.20	0.20	SU			09/20/18 11:23	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,3-Dichloropropane, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		75 - 131	09/12/18 20:20	09/19/18 17:56	1
Dibromofluoromethane	104		75 - 126	09/12/18 20:20	09/19/18 17:56	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/12/18 20:20	09/19/18 17:56	1
Toluene-d8 (Surr)	105		75 - 124	09/12/18 20:20	09/19/18 17:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Naphthalene	0.033	J	0.039	0.0060	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2-Methylnaphthalene	0.028	J	0.079	0.0072	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Acenaphthylene	0.028	J	0.039	0.0052	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Acenaphthene	0.052		0.039	0.0070	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Fluorene	0.059		0.039	0.0055	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Phenanthrene	0.63		0.039	0.0054	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Anthracene	0.13		0.039	0.0065	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Fluoranthene	0.80		0.039	0.0072	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Pyrene	0.77		0.039	0.0078	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Benzo[a]anthracene	0.39		0.039	0.0053	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.40		0.039	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Benzo[b]fluoranthene	0.49		0.039	0.0084	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Benzo[k]fluoranthene	0.16		0.039	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Benzo[a]pyrene	0.36		0.039	0.0076	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Indeno[1,2,3-cd]pyrene	0.14		0.039	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Dibenz(a,h)anthracene	0.038	J	0.039	0.0076	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Benzo[g,h,i]perylene	0.13		0.039	0.013	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	09/20/18 07:45	09/23/18 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	117		46 - 133				09/20/18 07:45	09/23/18 14:41	1
Phenol-d5	108		46 - 125				09/20/18 07:45	09/23/18 14:41	1
Nitrobenzene-d5	93		41 - 120				09/20/18 07:45	09/23/18 14:41	1
2-Fluorobiphenyl	104		44 - 121				09/20/18 07:45	09/23/18 14:41	1
2,4,6-Tribromophenol	82		25 - 139				09/20/18 07:45	09/23/18 14:41	1
Terphenyl-d14	99		35 - 160				09/20/18 07:45	09/23/18 14:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Arsenic	8.0		0.57	0.20	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Barium	44		0.57	0.065	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Beryllium	0.79		0.23	0.053	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Boron	21		2.9	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Cadmium	0.061	J B	0.11	0.021	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Calcium	55000	B	57	9.7	mg/Kg	☼	09/18/18 08:03	09/21/18 16:10	5
Chromium	18		0.57	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Cobalt	15		0.29	0.075	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Copper	29	B	0.57	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Iron	20000		11	5.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Lead	15		0.29	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Magnesium	23000		5.7	2.8	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Manganese	320		0.57	0.083	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Nickel	36		0.57	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Potassium	3800		29	10	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Selenium	0.71		0.57	0.34	mg/Kg	☼	09/18/18 08:03	09/21/18 16:06	1
Silver	0.17	J	0.29	0.074	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Sodium	240		57	8.5	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Thallium	0.70		0.57	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Vanadium	23		0.29	0.067	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1
Zinc	52		1.1	0.50	mg/Kg	☼	09/18/18 08:03	09/20/18 05:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:41	1
Boron	0.11	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:41	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:41	1
Cobalt	0.027		0.025	0.010	mg/L		09/18/18 07:44	09/21/18 02:37	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:41	1
Lead	0.0076		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:41	1
Manganese	2.2		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:41	1
Nickel	0.061		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:41	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:41	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:41	1
Zinc	0.16	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:41	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:37	09/18/18 20:45	1
Manganese	0.027		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:45	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0063	mg/Kg	☼	09/19/18 16:36	09/20/18 14:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.20	0.20	SU			09/20/18 11:26	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 131	09/12/18 20:20	09/19/18 18:22	1
Dibromofluoromethane	103		75 - 126	09/12/18 20:20	09/19/18 18:22	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	09/12/18 20:20	09/19/18 18:22	1
Toluene-d8 (Surr)	101		75 - 124	09/12/18 20:20	09/19/18 18:22	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2-Methylnaphthalene	0.034	J	0.080	0.0073	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Phenanthrene	0.068		0.039	0.0055	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Pyrene	0.013	J	0.039	0.0079	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	09/20/18 07:45	09/23/18 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	115		46 - 133				09/20/18 07:45	09/23/18 15:06	1
Phenol-d5	106		46 - 125				09/20/18 07:45	09/23/18 15:06	1
Nitrobenzene-d5	93		41 - 120				09/20/18 07:45	09/23/18 15:06	1
2-Fluorobiphenyl	106		44 - 121				09/20/18 07:45	09/23/18 15:06	1
2,4,6-Tribromophenol	76		25 - 139				09/20/18 07:45	09/23/18 15:06	1
Terphenyl-d14	100		35 - 160				09/20/18 07:45	09/23/18 15:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Arsenic	7.0		0.56	0.19	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Barium	41		0.56	0.064	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Beryllium	0.81		0.22	0.052	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Boron	23		2.8	0.26	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Cadmium	0.11 B		0.11	0.020	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Calcium	59000 B		56	9.5	mg/Kg	☼	09/18/18 08:03	09/21/18 16:18	5
Chromium	19		0.56	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Cobalt	13		0.28	0.073	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Copper	26 B		0.56	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Iron	19000		11	5.8	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Lead	14		0.28	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Magnesium	25000		5.6	2.8	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Manganese	310		0.56	0.081	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Nickel	34		0.56	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Potassium	3800		28	9.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	09/18/18 08:03	09/21/18 16:14	1
Silver	0.15 J		0.28	0.072	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Sodium	250		56	8.3	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Thallium	0.55 J		0.56	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Vanadium	23		0.28	0.066	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1
Zinc	58		1.1	0.49	mg/Kg	☼	09/18/18 08:03	09/20/18 05:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:45	1
Boron	0.12 J		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:45	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:45	1
Cobalt	0.019	J ^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:45	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:45	1
Manganese	1.9		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:45	1
Nickel	0.041		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:45	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:45	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:45	1
Zinc	0.073	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:45	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.068		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:48	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0066	mg/Kg	☼	09/20/18 16:55	09/21/18 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.20	0.20	SU			09/20/18 11:28	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 131	09/12/18 20:20	09/19/18 18:47	1
Dibromofluoromethane	103		75 - 126	09/12/18 20:20	09/19/18 18:47	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/12/18 20:20	09/19/18 18:47	1
Toluene-d8 (Surr)	99		75 - 124	09/12/18 20:20	09/19/18 18:47	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2-Methylnaphthalene	0.031	J	0.081	0.0074	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Acenaphthene	0.0074	J	0.040	0.0072	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Fluorene	0.0061	J	0.040	0.0056	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Phenanthrene	0.094		0.040	0.0056	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Pyrene	0.019	J	0.040	0.0080	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.040	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	113		46 - 133				09/20/18 07:45	09/23/18 15:32	1
Phenol-d5	106		46 - 125				09/20/18 07:45	09/23/18 15:32	1
Nitrobenzene-d5	93		41 - 120				09/20/18 07:45	09/23/18 15:32	1
2-Fluorobiphenyl	100		44 - 121				09/20/18 07:45	09/23/18 15:32	1
2,4,6-Tribromophenol	70		25 - 139				09/20/18 07:45	09/23/18 15:32	1
Terphenyl-d14	100		35 - 160				09/20/18 07:45	09/23/18 15:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.2	0.24	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Arsenic	8.1		0.62	0.21	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Barium	38		0.62	0.070	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Beryllium	0.80		0.25	0.058	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Boron	20		3.1	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Cadmium	0.079	J B	0.12	0.022	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Calcium	54000	B	62	10	mg/Kg	☼	09/18/18 08:03	09/21/18 16:26	5
Chromium	17		0.62	0.30	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Cobalt	14		0.31	0.081	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Copper	29	B	0.62	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Iron	21000		12	6.4	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Lead	15		0.31	0.14	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Magnesium	24000		6.2	3.1	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Manganese	330		0.62	0.089	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Nickel	36		0.62	0.18	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Potassium	3400		31	11	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Selenium	<0.62		0.62	0.36	mg/Kg	☼	09/18/18 08:03	09/21/18 16:22	1
Silver	0.15	J	0.31	0.079	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Sodium	210		62	9.1	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Thallium	0.69		0.62	0.31	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Vanadium	22		0.31	0.073	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1
Zinc	53		1.2	0.54	mg/Kg	☼	09/18/18 08:03	09/20/18 05:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:49	1
Boron	0.14	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:49	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:49	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:49	1
Cobalt	0.019	J ^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:49	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:49	1
Manganese	2.0		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:49	1
Nickel	0.043		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:49	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:49	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:49	1
Zinc	0.13	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:49	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.35		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:52	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.021	0.0068	mg/Kg	☼	09/20/18 16:55	09/21/18 11:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.20	0.20	SU			09/20/18 11:31	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131	09/12/18 20:20	09/19/18 19:12	1
Dibromofluoromethane	106		75 - 126	09/12/18 20:20	09/19/18 19:12	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	09/12/18 20:20	09/19/18 19:12	1
Toluene-d8 (Surr)	97		75 - 124	09/12/18 20:20	09/19/18 19:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Phenanthrene	0.042		0.039	0.0055	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Anthracene	0.0077 J		0.039	0.0066	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Fluoranthene	0.067		0.039	0.0073	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Pyrene	0.066		0.039	0.0078	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Benzo[a]anthracene	0.034 J		0.039	0.0053	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.044		0.039	0.011	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Benzo[b]fluoranthene	0.057		0.039	0.0085	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Benzo[k]fluoranthene	0.027 J		0.039	0.012	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Benzo[a]pyrene	0.037 J		0.039	0.0076	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Indeno[1,2,3-cd]pyrene	0.018 J		0.039	0.010	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Benzo[g,h,i]perylene	0.019 J		0.039	0.013	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	09/20/18 07:45	09/23/18 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	118		46 - 133				09/20/18 07:45	09/23/18 15:57	1
Phenol-d5	108		46 - 125				09/20/18 07:45	09/23/18 15:57	1
Nitrobenzene-d5	94		41 - 120				09/20/18 07:45	09/23/18 15:57	1
2-Fluorobiphenyl	105		44 - 121				09/20/18 07:45	09/23/18 15:57	1
2,4,6-Tribromophenol	89		25 - 139				09/20/18 07:45	09/23/18 15:57	1
Terphenyl-d14	97		35 - 160				09/20/18 07:45	09/23/18 15:57	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Arsenic	8.0		0.57	0.19	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Barium	120		0.57	0.065	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Beryllium	0.69		0.23	0.053	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Boron	7.3		2.8	0.26	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Cadmium	0.22 B		0.11	0.020	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Calcium	10000 B		11	1.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Chromium	19		0.57	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Cobalt	11		0.28	0.074	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Copper	21 B		0.57	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Iron	17000		11	5.9	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Lead	32		0.28	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Magnesium	6300		5.7	2.8	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Manganese	460		0.57	0.082	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Nickel	20		0.57	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Potassium	1700		28	10	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Selenium	0.42 J		0.57	0.33	mg/Kg	☼	09/18/18 08:03	09/21/18 16:30	1
Silver	0.19 J		0.28	0.073	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Sodium	130		57	8.4	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Thallium	0.50 J		0.57	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Vanadium	27		0.28	0.067	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1
Zinc	72		1.1	0.50	mg/Kg	☼	09/18/18 08:03	09/20/18 05:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:53	1
Boron	0.089 J		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:53	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:53	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:53	1
Cobalt	<0.025	^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:53	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:53	1
Manganese	0.45		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:53	1
Nickel	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:53	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:53	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:53	1
Zinc	0.094	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:53	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.15		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 20:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 02:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 02:55	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.056		0.020	0.0065	mg/Kg	☼	09/20/18 16:55	09/21/18 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.20	0.20	SU			09/20/18 11:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 86.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		75 - 131	09/12/18 20:20	09/19/18 19:37	1
Dibromofluoromethane	105		75 - 126	09/12/18 20:20	09/19/18 19:37	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	09/12/18 20:20	09/19/18 19:37	1
Toluene-d8 (Surr)	103		75 - 124	09/12/18 20:20	09/19/18 19:37	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Acenaphthene	0.027	J	0.037	0.0067	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Phenanthrene	0.20		0.037	0.0052	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Pyrene	0.031	J	0.037	0.0074	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	09/19/18 18:35	09/20/18 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		46 - 133				09/19/18 18:35	09/20/18 15:51	1
Phenol-d5	94		46 - 125				09/19/18 18:35	09/20/18 15:51	1
Nitrobenzene-d5	111		41 - 120				09/19/18 18:35	09/20/18 15:51	1
2-Fluorobiphenyl	108		44 - 121				09/19/18 18:35	09/20/18 15:51	1
2,4,6-Tribromophenol	91		25 - 139				09/19/18 18:35	09/20/18 15:51	1
Terphenyl-d14	101		35 - 160				09/19/18 18:35	09/20/18 15:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Arsenic	8.9		0.57	0.20	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Barium	27		0.57	0.065	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Beryllium	0.67		0.23	0.053	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Boron	17		2.9	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Cadmium	0.088	J B	0.11	0.021	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Calcium	60000	B	57	9.7	mg/Kg	☼	09/18/18 08:03	09/21/18 16:41	5
Chromium	14		0.57	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Cobalt	14		0.29	0.075	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Copper	36	B	0.57	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Iron	21000		11	5.9	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Lead	17		0.29	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Magnesium	28000		5.7	2.8	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Manganese	460		0.57	0.083	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Nickel	38		0.57	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Potassium	2900		29	10	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Selenium	0.57		0.57	0.34	mg/Kg	☼	09/18/18 08:03	09/21/18 16:37	1
Silver	0.17	J	0.29	0.074	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Sodium	210		57	8.5	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Thallium	0.42	J	0.57	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Vanadium	18		0.29	0.067	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1
Zinc	49		1.1	0.50	mg/Kg	☼	09/18/18 08:03	09/20/18 06:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.16	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 20:58	1
Boron	0.10	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 20:58	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 86.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 20:58	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:58	1
Cobalt	0.036		0.025	0.010	mg/L		09/18/18 07:44	09/21/18 02:42	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 20:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 20:58	1
Manganese	2.3		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:58	1
Nickel	0.084		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:58	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 20:58	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 20:58	1
Zinc	0.085	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 20:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.14		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 21:10	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 03:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 03:10	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.017	0.0058	mg/Kg	☼	09/20/18 16:55	09/21/18 11:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.20	0.20	SU			09/20/18 11:35	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
2-Hexanone	<0.0039	*	0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,1,2,2-Tetrachloroethane	<0.0016	*	0.0016	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 23:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		75 - 131	09/12/18 20:20	09/19/18 23:28	1
Dibromofluoromethane	105		75 - 126	09/12/18 20:20	09/19/18 23:28	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/12/18 20:20	09/19/18 23:28	1
Toluene-d8 (Surr)	102		75 - 124	09/12/18 20:20	09/19/18 23:28	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Naphthalene	0.012	J	0.036	0.0056	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Acenaphthene	0.021	J	0.036	0.0065	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Fluorene	0.0091	J	0.036	0.0051	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Phenanthrene	0.15		0.036	0.0050	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Pyrene	0.024	J	0.036	0.0072	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.033	J	0.036	0.0099	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	09/19/18 18:35	09/20/18 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	90		46 - 133				09/19/18 18:35	09/20/18 16:16	1
Phenol-d5	87		46 - 125				09/19/18 18:35	09/20/18 16:16	1
Nitrobenzene-d5	105		41 - 120				09/19/18 18:35	09/20/18 16:16	1
2-Fluorobiphenyl	104		44 - 121				09/19/18 18:35	09/20/18 16:16	1
2,4,6-Tribromophenol	83		25 - 139				09/19/18 18:35	09/20/18 16:16	1
Terphenyl-d14	98		35 - 160				09/19/18 18:35	09/20/18 16:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Arsenic	8.2		0.54	0.18	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Barium	25		0.54	0.061	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Beryllium	0.63		0.21	0.050	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Boron	16		2.7	0.25	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Cadmium	0.092	J B	0.11	0.019	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Calcium	69000	B	54	9.1	mg/Kg	☼	09/18/18 08:03	09/21/18 16:57	5
Chromium	13		0.54	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Cobalt	13		0.27	0.070	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Copper	32	B	0.54	0.15	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Iron	18000		11	5.6	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Lead	16		0.27	0.12	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Magnesium	33000		5.4	2.7	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Manganese	450		0.54	0.078	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Nickel	33		0.54	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Potassium	2700		27	9.5	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	09/18/18 08:03	09/21/18 16:53	1
Silver	0.13	J	0.27	0.069	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Sodium	200		54	7.9	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Thallium	0.47	J	0.54	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Vanadium	16		0.27	0.063	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1
Zinc	45		1.1	0.47	mg/Kg	☼	09/18/18 08:03	09/20/18 06:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.31	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 21:02	1
Boron	0.092	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:02	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 87.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Chromium	<0.025		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Cobalt	0.033		0.025	0.010	mg/L	-	09/18/18 07:44	09/21/18 02:46	1
Iron	<0.40		0.40	0.20	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Manganese	2.3		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Nickel	0.082		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Selenium	<0.050		0.050	0.020	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Silver	<0.025		0.025	0.010	mg/L	-	09/18/18 07:44	09/19/18 21:02	1
Zinc	0.036	J B	0.50	0.020	mg/L	-	09/18/18 07:44	09/19/18 21:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.039		0.025	0.010	mg/L	-	09/18/18 07:37	09/18/18 21:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	09/18/18 07:44	09/19/18 03:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	09/18/18 07:44	09/19/18 03:14	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	09/18/18 11:12	09/19/18 08:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.017	0.0056	mg/Kg	☼	09/20/18 16:55	09/21/18 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.20	0.20	SU	-		09/20/18 11:38	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Date Collected: 09/12/18 11:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
2-Hexanone	<0.0039	*	0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,1,2,2-Tetrachloroethane	<0.0016	*	0.0016	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	09/12/18 20:20	09/19/18 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 131	09/12/18 20:20	09/19/18 23:53	1
Dibromofluoromethane	104		75 - 126	09/12/18 20:20	09/19/18 23:53	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	09/12/18 20:20	09/19/18 23:53	1
Toluene-d8 (Surr)	99		75 - 124	09/12/18 20:20	09/19/18 23:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Date Collected: 09/12/18 11:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2-Methylnaphthalene	0.058	J	0.077	0.0070	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Acenaphthene	0.027	J	0.038	0.0069	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Fluorene	0.012	J	0.038	0.0054	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Date Collected: 09/12/18 11:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.038	0.010	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	09/19/18 18:35	09/20/18 16:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		46 - 133				09/19/18 18:35	09/20/18 16:41	1
Phenol-d5	99		46 - 125				09/19/18 18:35	09/20/18 16:41	1
Nitrobenzene-d5	115		41 - 120				09/19/18 18:35	09/20/18 16:41	1
2-Fluorobiphenyl	118		44 - 121				09/19/18 18:35	09/20/18 16:41	1
2,4,6-Tribromophenol	102		25 - 139				09/19/18 18:35	09/20/18 16:41	1
Terphenyl-d14	109		35 - 160				09/19/18 18:35	09/20/18 16:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Arsenic	8.2		0.58	0.20	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Barium	33		0.58	0.067	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Beryllium	0.71		0.23	0.055	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Boron	18		2.9	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Cadmium	0.090	J B	0.12	0.021	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Calcium	65000	B	58	9.9	mg/Kg	☼	09/18/18 08:03	09/21/18 17:05	5
Chromium	15		0.58	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Cobalt	13		0.29	0.077	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Copper	31	B	0.58	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Iron	19000		12	6.1	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Lead	15		0.29	0.14	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Magnesium	29000		5.8	2.9	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Manganese	360		0.58	0.085	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Nickel	34		0.58	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Potassium	3000		29	10	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Selenium	0.35	J	0.58	0.34	mg/Kg	☼	09/18/18 08:03	09/21/18 17:01	1
Silver	0.13	J	0.29	0.075	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Sodium	210		58	8.7	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Thallium	0.46	J	0.58	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Vanadium	19		0.29	0.069	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1
Zinc	50		1.2	0.51	mg/Kg	☼	09/18/18 08:03	09/20/18 06:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 21:14	1
Boron	0.11	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:14	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Date Collected: 09/12/18 11:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 21:14	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:14	1
Cobalt	0.017	J ^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:14	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 21:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 21:14	1
Manganese	2.0		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:14	1
Nickel	0.038		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:14	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 21:14	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:14	1
Zinc	0.044	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 21:14	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		09/18/18 07:37	09/18/18 21:19	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 03:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 03:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.019	0.0064	mg/Kg	☼	09/20/18 16:55	09/21/18 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.20	0.20	SU			09/20/18 11:40	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Chloroethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Chloromethane	<0.0046	*	0.0046	0.0018	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
2-Hexanone	<0.0046	*	0.0046	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,1,2,2-Tetrachloroethane	<0.0018	*	0.0018	0.00059	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	09/12/18 20:20	09/20/18 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	09/12/18 20:20	09/20/18 00:19	1
Dibromofluoromethane	104		75 - 126	09/12/18 20:20	09/20/18 00:19	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	09/12/18 20:20	09/20/18 00:19	1
Toluene-d8 (Surr)	100		75 - 124	09/12/18 20:20	09/20/18 00:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
1,3-Dichlorobenzene	<0.20	F1	0.20	0.045	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
1,4-Dichlorobenzene	<0.20	F1	0.20	0.051	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20	F1	0.20	0.048	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Hexachloroethane	<0.20	F1	0.20	0.061	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Hexachlorocyclopentadiene	<0.80	F1	0.80	0.23	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2-Methylnaphthalene	0.034	J	0.080	0.0073	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,4-Dinitrophenol	<0.80	F1	0.80	0.70	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Acenaphthene	0.011	J	0.040	0.0072	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4-Nitrophenol	<0.80	F1	0.80	0.38	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Fluorene	0.0082	J	0.040	0.0056	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
N-Nitrosodiphenylamine	<0.20	F1	0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
4,6-Dinitro-2-methylphenol	<0.80	F1	0.80	0.32	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Phenanthrene	0.10		0.040	0.0056	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Pyrene	0.023	J	0.040	0.0079	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.076	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.025	J	0.040	0.011	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.073	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Benzo[b]fluoranthene	<0.040	F1	0.040	0.0086	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Benzo[k]fluoranthene	<0.040	F1	0.040	0.012	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Benzo[g,h,i]perylene	<0.040	F1	0.040	0.013	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	09/19/18 17:40	09/23/18 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		46 - 133				09/19/18 17:40	09/23/18 19:46	1
Phenol-d5	58		46 - 125				09/19/18 17:40	09/23/18 19:46	1
Nitrobenzene-d5	48		41 - 120				09/19/18 17:40	09/23/18 19:46	1
2-Fluorobiphenyl	58		44 - 121				09/19/18 17:40	09/23/18 19:46	1
2,4,6-Tribromophenol	37		25 - 139				09/19/18 17:40	09/23/18 19:46	1
Terphenyl-d14	68		35 - 160				09/19/18 17:40	09/23/18 19:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Arsenic	7.7		0.61	0.21	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Barium	40		0.61	0.070	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Beryllium	0.75		0.24	0.057	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Boron	19		3.0	0.28	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Cadmium	0.061	J B	0.12	0.022	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Calcium	57000	B	61	10	mg/Kg	☼	09/18/18 08:03	09/21/18 17:13	5
Chromium	17		0.61	0.30	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Cobalt	14		0.30	0.080	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Copper	32	B	0.61	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Iron	20000		12	6.3	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Lead	15		0.30	0.14	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Magnesium	24000		6.1	3.0	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Manganese	320		0.61	0.088	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Nickel	36		0.61	0.18	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Potassium	3400		30	11	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Selenium	<0.61		0.61	0.36	mg/Kg	☼	09/18/18 08:03	09/21/18 17:09	1
Silver	0.19	J	0.30	0.079	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Sodium	210		61	9.0	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Thallium	0.59	J	0.61	0.30	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Vanadium	22		0.30	0.072	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1
Zinc	54		1.2	0.54	mg/Kg	☼	09/18/18 08:03	09/20/18 06:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 21:18	1
Boron	0.12	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:18	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 21:18	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:18	1
Cobalt	0.015	J ^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:18	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 21:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 21:18	1
Manganese	2.0		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:18	1
Nickel	0.032		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:18	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 21:18	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:18	1
Zinc	<0.50		0.50	0.020	mg/L		09/18/18 07:44	09/19/18 21:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.045		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 21:23	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 03:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 03:21	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.020	0.0066	mg/Kg	☼	09/20/18 16:55	09/21/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.20	0.20	SU			09/20/18 11:42	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Chloromethane	<0.0045	*	0.0045	0.0018	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
2-Hexanone	<0.0045	*	0.0045	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,1,2,2-Tetrachloroethane	<0.0018	*	0.0018	0.00057	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	09/12/18 20:20	09/20/18 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	09/12/18 20:20	09/20/18 00:45	1
Dibromofluoromethane	106		75 - 126	09/12/18 20:20	09/20/18 00:45	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/12/18 20:20	09/20/18 00:45	1
Toluene-d8 (Surr)	100		75 - 124	09/12/18 20:20	09/20/18 00:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Naphthalene	0.012	J	0.040	0.0062	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2-Methylnaphthalene	0.031	J	0.081	0.0074	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Acenaphthene	0.012	J	0.040	0.0072	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Fluorene	0.0098	J	0.040	0.0056	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Phenanthrene	0.13		0.040	0.0056	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Pyrene	0.026	J	0.040	0.0080	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.031	J	0.040	0.011	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Benzo[g,h,i]perylene	0.023	J	0.040	0.013	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	09/19/18 17:40	09/22/18 22:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	73		46 - 133				09/19/18 17:40	09/22/18 22:54	1
Phenol-d5	73		46 - 125				09/19/18 17:40	09/22/18 22:54	1
Nitrobenzene-d5	61		41 - 120				09/19/18 17:40	09/22/18 22:54	1
2-Fluorobiphenyl	70		44 - 121				09/19/18 17:40	09/22/18 22:54	1
2,4,6-Tribromophenol	69		25 - 139				09/19/18 17:40	09/22/18 22:54	1
Terphenyl-d14	86		35 - 160				09/19/18 17:40	09/22/18 22:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Arsenic	7.4		0.58	0.20	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Barium	39		0.58	0.066	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Beryllium	0.77		0.23	0.054	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Boron	18		2.9	0.27	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Cadmium	0.063	J B	0.12	0.021	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Calcium	55000	B	58	9.9	mg/Kg	☼	09/18/18 08:03	09/21/18 17:21	5
Chromium	17		0.58	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Cobalt	14		0.29	0.076	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Copper	27	B	0.58	0.16	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Iron	20000		12	6.1	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Lead	14		0.29	0.13	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Magnesium	24000		5.8	2.9	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Manganese	310		0.58	0.084	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Nickel	36		0.58	0.17	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Potassium	3300		29	10	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	09/18/18 08:03	09/21/18 17:17	1
Silver	0.19	J	0.29	0.075	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Sodium	210		58	8.6	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Thallium	0.50	J	0.58	0.29	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Vanadium	21		0.29	0.069	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1
Zinc	53		1.2	0.51	mg/Kg	☼	09/18/18 08:03	09/20/18 06:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 21:23	1
Boron	0.16	J	0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 21:23	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:23	1
Cobalt	0.015	J ^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:23	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 21:23	1
Manganese	2.0		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:23	1
Nickel	0.030		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:23	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 21:23	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:23	1
Zinc	0.042	J B	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 21:23	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.099		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 21:27	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 03:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 03:25	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 08:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0062	mg/Kg	☼	09/20/18 16:55	09/21/18 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.20	0.20	SU			09/20/18 11:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Chloromethane	<0.0044	*	0.0044	0.0018	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,3-Dichloropropane, Total	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
2-Hexanone	<0.0044	*	0.0044	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,1,2,2-Tetrachloroethane	<0.0018	*	0.0018	0.00056	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00061	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	09/12/18 20:20	09/20/18 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	09/12/18 20:20	09/20/18 01:10	1
Dibromofluoromethane	105		75 - 126	09/12/18 20:20	09/20/18 01:10	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	09/12/18 20:20	09/20/18 01:10	1
Toluene-d8 (Surr)	99		75 - 124	09/12/18 20:20	09/20/18 01:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2-Methylnaphthalene	0.048	J	0.080	0.0073	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Acenaphthene	0.012	J	0.039	0.0071	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Fluorene	0.012	J	0.039	0.0055	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Phenanthrene	0.16		0.039	0.0055	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Fluoranthene	0.0083	J	0.039	0.0073	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Pyrene	0.038	J	0.039	0.0078	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
Benzo[g,h,i]perylene	0.024	J	0.039	0.013	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	09/19/18 17:40	09/23/18 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	109		46 - 133	09/19/18 17:40	09/23/18 16:23	1
Phenol-d5	108		46 - 125	09/19/18 17:40	09/23/18 16:23	1
Nitrobenzene-d5	78		41 - 120	09/19/18 17:40	09/23/18 16:23	1
2-Fluorobiphenyl	91		44 - 121	09/19/18 17:40	09/23/18 16:23	1
2,4,6-Tribromophenol	65		25 - 139	09/19/18 17:40	09/23/18 16:23	1
Terphenyl-d14	102		35 - 160	09/19/18 17:40	09/23/18 16:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J	1.2	0.24	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Arsenic	7.3		0.61	0.21	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Barium	45		0.61	0.070	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Beryllium	0.72		0.25	0.057	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Boron	22		3.1	0.29	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Cadmium	0.25	B	0.12	0.022	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Calcium	63000	B	120	21	mg/Kg	☼	09/18/18 08:19	09/19/18 21:10	10
Chromium	18		0.61	0.30	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Cobalt	13		0.31	0.080	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Copper	31	B	0.61	0.17	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Iron	20000	B	12	6.4	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Lead	14		0.31	0.14	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Magnesium	23000		6.1	3.0	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Manganese	320	B	0.61	0.089	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Nickel	35		0.61	0.18	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Potassium	3600		31	11	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Selenium	0.64		0.61	0.36	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Silver	0.27	J	0.31	0.079	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Sodium	220		61	9.1	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Thallium	0.73		0.61	0.31	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Vanadium	23		0.31	0.073	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1
Zinc	54		1.2	0.54	mg/Kg	☼	09/18/18 08:19	09/18/18 19:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		09/18/18 07:47	09/21/18 00:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:47	09/21/18 00:40	1
Boron	0.10	J	0.50	0.050	mg/L		09/18/18 07:47	09/21/18 00:40	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:47	09/21/18 00:40	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:40	1
Cobalt	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:40	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:47	09/21/18 00:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:47	09/21/18 16:11	1
Manganese	1.9		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:40	1
Nickel	0.032		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:40	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:47	09/21/18 00:40	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:40	1
Zinc	0.083	J	0.50	0.020	mg/L		09/18/18 07:47	09/21/18 00:40	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L		09/18/18 07:41	09/18/18 18:41	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:47	09/19/18 19:34	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:47	09/19/18 19:34	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/17/18 12:17	09/18/18 09:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.020	0.0066	mg/Kg	☼	09/20/18 16:55	09/21/18 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.20	0.20	SU			09/20/18 11:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 81.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Chloromethane	<0.0040	*	0.0040	0.0016	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
2-Hexanone	<0.0040	*	0.0040	0.0013	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,1,2,2-Tetrachloroethane	<0.0016	*	0.0016	0.00051	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	09/12/18 20:20	09/20/18 01:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 131	09/12/18 20:20	09/20/18 01:36	1
Dibromofluoromethane	104		75 - 126	09/12/18 20:20	09/20/18 01:36	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	09/12/18 20:20	09/20/18 01:36	1
Toluene-d8 (Surr)	99		75 - 124	09/12/18 20:20	09/20/18 01:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2-Methylnaphthalene	0.066	J	0.079	0.0072	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Fluorene	0.014	J	0.039	0.0055	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Phenanthrene	0.13		0.039	0.0054	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Fluoranthene	0.010	J	0.039	0.0072	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Pyrene	0.036	J	0.039	0.0078	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.035	J	0.039	0.011	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
Benzo[g,h,i]perylene	0.028	J	0.039	0.013	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	09/19/18 17:40	09/22/18 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		46 - 133	09/19/18 17:40	09/22/18 23:45	1
Phenol-d5	92		46 - 125	09/19/18 17:40	09/22/18 23:45	1
Nitrobenzene-d5	74		41 - 120	09/19/18 17:40	09/22/18 23:45	1
2-Fluorobiphenyl	86		44 - 121	09/19/18 17:40	09/22/18 23:45	1
2,4,6-Tribromophenol	86		25 - 139	09/19/18 17:40	09/22/18 23:45	1
Terphenyl-d14	106		35 - 160	09/19/18 17:40	09/22/18 23:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J	1.1	0.22	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Arsenic	7.2		0.57	0.19	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Barium	48		0.57	0.064	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Beryllium	0.71		0.23	0.053	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Boron	21		2.8	0.26	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Cadmium	0.20	B	0.11	0.020	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Calcium	71000	B	110	19	mg/Kg	☼	09/18/18 08:19	09/19/18 21:22	10
Chromium	18		0.57	0.28	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Cobalt	13		0.28	0.074	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Copper	28	B	0.57	0.16	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Iron	20000	B	11	5.9	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Lead	15		0.28	0.13	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Magnesium	24000		5.7	2.8	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Manganese	320	B	0.57	0.082	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Nickel	35		0.57	0.16	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Potassium	3400		28	10	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Selenium	0.37	J	0.57	0.33	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Silver	0.29		0.28	0.073	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Sodium	230		57	8.4	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Thallium	0.57		0.57	0.28	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Vanadium	23		0.28	0.067	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1
Zinc	47		1.1	0.50	mg/Kg	☼	09/18/18 08:19	09/18/18 19:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		09/18/18 07:47	09/21/18 00:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:47	09/21/18 00:44	1
Boron	0.099	J	0.50	0.050	mg/L		09/18/18 07:47	09/21/18 00:44	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 81.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:47	09/21/18 00:44	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:44	1
Cobalt	0.011	J	0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:44	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:47	09/21/18 00:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:47	09/21/18 16:15	1
Manganese	2.0		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:44	1
Nickel	0.035		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:44	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:47	09/21/18 00:44	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:44	1
Zinc	0.023	J	0.50	0.020	mg/L		09/18/18 07:47	09/21/18 00:44	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L		09/18/18 07:41	09/18/18 18:45	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:47	09/19/18 19:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:47	09/19/18 19:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/17/18 12:17	09/18/18 09:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.020	0.0067	mg/Kg	☼	09/20/18 16:55	09/21/18 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.20	0.20	SU			09/20/18 11:52	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

GC/MS VOA

Prep Batch: 450284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	5035	
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	5035	
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	5035	
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	5035	
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	5035	
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	5035	
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	5035	
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	5035	
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	5035	
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	5035	
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	5035	
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	5035	
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	5035	
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	5035	
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	5035	
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	5035	
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	5035	
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	5035	
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	5035	
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	5035	
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	5035	
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	5035	
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	5035	
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	5035	
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	5035	
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	5035	
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	5035	
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	5035	
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	5035	
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	5035	

Analysis Batch: 450605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	8260B	450284
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	8260B	450284
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	8260B	450284
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	8260B	450284
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	8260B	450284
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	8260B	450284
MB 500-450605/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-450605/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-450605/25	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 450606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	8260B	450284
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	8260B	450284
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	8260B	450284
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	8260B	450284
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	8260B	450284
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	8260B	450284

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

GC/MS VOA (Continued)

Analysis Batch: 450606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	8260B	450284
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	8260B	450284
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	8260B	450284
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	8260B	450284
MB 500-450606/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-450606/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-450606/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 450699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	8260B	450284
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	8260B	450284
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	8260B	450284
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	8260B	450284
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	8260B	450284
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	8260B	450284
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	8260B	450284
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	8260B	450284
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	8260B	450284
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	8260B	450284
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	8260B	450284
MB 500-450699/5	Method Blank	Total/NA	Solid	8260B	
LCS 500-450699/27	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-450699/28	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 450856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	8260B	450284
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	8260B	450284
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	8260B	450284
MB 500-450856/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-450856/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-450856/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 450775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	3541	
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	3541	
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	3541	
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	3541	
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	3541	
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	3541	
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	3541	
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	3541	
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	3541	
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	3541	
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	3541	
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	3541	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

GC/MS Semi VOA (Continued)

Prep Batch: 450775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-450775/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-450775/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-151344-19 MS	2615V-118-B12 (15-23)	Total/NA	Solid	3541	
500-151344-19 MSD	2615V-118-B12 (15-23)	Total/NA	Solid	3541	

Prep Batch: 450787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	3541	
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	3541	
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	3541	
MB 500-450787/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-450787/2-A	Lab Control Sample	Total/NA	Solid	3541	

Prep Batch: 450846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1 - DL	2615V-118-B09 (0-5)	Total/NA	Solid	3541	
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	3541	
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	3541	
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	3541	
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	3541	
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	3541	
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	3541	
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	3541	
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	3541	
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	3541	
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	3541	
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	3541	
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	3541	
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	3541	
MB 500-450846/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-450846/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 450849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-450787/1-A	Method Blank	Total/NA	Solid	8270D	450787
LCS 500-450787/2-A	Lab Control Sample	Total/NA	Solid	8270D	450787

Analysis Batch: 450862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	8270D	450787
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	8270D	450787
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	8270D	450787

Analysis Batch: 451099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-450775/1-A	Method Blank	Total/NA	Solid	8270D	450775
MB 500-450846/1-A	Method Blank	Total/NA	Solid	8270D	450846
LCS 500-450775/2-A	Lab Control Sample	Total/NA	Solid	8270D	450775
LCS 500-450846/2-A	Lab Control Sample	Total/NA	Solid	8270D	450846

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

GC/MS Semi VOA (Continued)

Analysis Batch: 451274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	8270D	450775
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	8270D	450775
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	8270D	450775
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	8270D	450775

Analysis Batch: 451317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	8270D	450846
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	8270D	450846
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	8270D	450846
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	8270D	450846
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	8270D	450846
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	8270D	450846
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	8270D	450846
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	8270D	450846
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	8270D	450846
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	8270D	450846
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	8270D	450846
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	8270D	450846
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	8270D	450846
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	8270D	450775
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	8270D	450775
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	8270D	450775
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	8270D	450775
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	8270D	450775
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	8270D	450775
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	8270D	450775
500-151344-19 MS	2615V-118-B12 (15-23)	Total/NA	Solid	8270D	450775

Analysis Batch: 451400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1 - DL	2615V-118-B09 (0-5)	Total/NA	Solid	8270D	450846
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	8270D	450775
500-151344-19 MSD	2615V-118-B12 (15-23)	Total/NA	Solid	8270D	450775

Prep Batch: 451519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	3541	
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	3541	
MB 500-451519/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-451519/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 451567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	8270D	451519
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	8270D	451519
MB 500-451519/1-A	Method Blank	Total/NA	Solid	8270D	451519
LCS 500-451519/2-A	Lab Control Sample	Total/NA	Solid	8270D	451519

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals

Leach Batch: 450136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	SPLP East	Solid	1312	
500-151344-2	2615V-118-B09 (5-10)	SPLP East	Solid	1312	
500-151344-3	2615V-118-B09 (10-15)	SPLP East	Solid	1312	
500-151344-4	2615V-118-B09 (15-23)	SPLP East	Solid	1312	
500-151344-5	2615V-118-B09 (23-31)	SPLP East	Solid	1312	
500-151344-6	2615V-118-B09 (31-39)	SPLP East	Solid	1312	
500-151344-7	2615V-118-B09 (39-47)	SPLP East	Solid	1312	
500-151344-8	2615V-118-B35 (0-5)	SPLP East	Solid	1312	
500-151344-9	2615V-118-B35 (5-10)	SPLP East	Solid	1312	
500-151344-10	2615V-118-B35 (10-15)	SPLP East	Solid	1312	
500-151344-11	2615V-118-B35 (15-23)	SPLP East	Solid	1312	
500-151344-12	2615V-118-B35 (23-31)	SPLP East	Solid	1312	
500-151344-13	2615V-118-B35 (31-39)	SPLP East	Solid	1312	
500-151344-14	2615V-118-B35 (39-47)	SPLP East	Solid	1312	
500-151344-15	2615V-118-B12 (0-5)	SPLP East	Solid	1312	
500-151344-16	2615V-118-B12 (5-10)	SPLP East	Solid	1312	
500-151344-17	2615V-118-B12 (5-10) D	SPLP East	Solid	1312	
500-151344-18	2615V-118-B12 (10-15)	SPLP East	Solid	1312	
500-151344-19	2615V-118-B12 (15-23)	SPLP East	Solid	1312	
500-151344-20	2615V-118-B12 (23-31)	SPLP East	Solid	1312	
LB 500-450136/1-B	Method Blank	SPLP East	Solid	1312	
500-151344-20 MS	2615V-118-B12 (23-31)	SPLP East	Solid	1312	
500-151344-20 DU	2615V-118-B12 (23-31)	SPLP East	Solid	1312	

Leach Batch: 450137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	SPLP East	Solid	1312	
500-151344-22	2615V-118-B12 (39-47)	SPLP East	Solid	1312	
500-151344-23	2615V-118-B10 (0-5)	SPLP East	Solid	1312	
500-151344-24	2615V-118-B10 (5-10)	SPLP East	Solid	1312	
500-151344-25	2615V-118-B10 (10-15)	SPLP East	Solid	1312	
500-151344-26	2615V-118-B10 (15-23)	SPLP East	Solid	1312	
500-151344-27	2615V-118-B10 (23-31)	SPLP East	Solid	1312	
500-151344-28	2615V-118-B10 (31-39)	SPLP East	Solid	1312	
500-151344-29	2615V-118-B10 (39-47)	SPLP East	Solid	1312	
500-151344-30	2615V-118-B10 (39-47) D	SPLP East	Solid	1312	
LB 500-450137/1-B	Method Blank	SPLP East	Solid	1312	
500-151344-30 MS	2615V-118-B10 (39-47) D	SPLP East	Solid	1312	
500-151344-30 DU	2615V-118-B10 (39-47) D	SPLP East	Solid	1312	

Leach Batch: 450138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	1311	
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	1311	
500-151344-3	2615V-118-B09 (10-15)	TCLP	Solid	1311	
500-151344-5	2615V-118-B09 (23-31)	TCLP	Solid	1311	
500-151344-6	2615V-118-B09 (31-39)	TCLP	Solid	1311	
500-151344-7	2615V-118-B09 (39-47)	TCLP	Solid	1311	
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	1311	
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	1311	
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	1311	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Leach Batch: 450138 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	1311	
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	1311	
500-151344-13	2615V-118-B35 (31-39)	TCLP	Solid	1311	
500-151344-14	2615V-118-B35 (39-47)	TCLP	Solid	1311	
500-151344-15	2615V-118-B12 (0-5)	TCLP	Solid	1311	
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	1311	
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	1311	
500-151344-18	2615V-118-B12 (10-15)	TCLP	Solid	1311	
500-151344-19	2615V-118-B12 (15-23)	TCLP	Solid	1311	
500-151344-20	2615V-118-B12 (23-31)	TCLP	Solid	1311	
LB 500-450138/1-B	Method Blank	TCLP	Solid	1311	
LB 500-450138/1-C	Method Blank	TCLP	Solid	1311	
500-151344-7 MS	2615V-118-B09 (39-47)	TCLP	Solid	1311	
500-151344-10 MS	2615V-118-B35 (10-15)	TCLP	Solid	1311	
500-151344-7 DU	2615V-118-B09 (39-47)	TCLP	Solid	1311	
500-151344-10 DU	2615V-118-B35 (10-15)	TCLP	Solid	1311	

Leach Batch: 450139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	1311	
LB2 500-450139/1-B	Method Blank	TCLP	Solid	1311	
LB2 500-450139/1-C	Method Blank	TCLP	Solid	1311	

Leach Batch: 450140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	1311	
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	1311	
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	1311	
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	1311	
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	1311	
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	1311	
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	1311	
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	1311	
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	1311	
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	1311	
LB 500-450140/1-B	Method Blank	TCLP	Solid	1311	
LB 500-450140/1-C	Method Blank	TCLP	Solid	1311	
500-151344-24 MS	2615V-118-B10 (5-10)	TCLP	Solid	1311	
500-151344-24 DU	2615V-118-B10 (5-10)	TCLP	Solid	1311	

Prep Batch: 450263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	7470A	450139
LB2 500-450139/1-B	Method Blank	TCLP	Solid	7470A	450139
MB 500-450263/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-450263/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 450273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	7470A	450140
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	7470A	450140

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Prep Batch: 450273 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	7470A	450140
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	7470A	450140
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	7470A	450140
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	7470A	450140
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	7470A	450140
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	7470A	450140
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	7470A	450140
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	7470A	450140
LB 500-450140/1-B	Method Blank	TCLP	Solid	7470A	450140
MB 500-450273/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-450273/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-151344-24 MS	2615V-118-B10 (5-10)	TCLP	Solid	7470A	450140
500-151344-24 DU	2615V-118-B10 (5-10)	TCLP	Solid	7470A	450140

Prep Batch: 450335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	3050B	
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	3050B	
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	3050B	
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	3050B	
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	3050B	
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	3050B	
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	3050B	
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	3050B	
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	3050B	
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	3050B	
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	3050B	
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	3050B	
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	3050B	
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	3050B	
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	3050B	
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	3050B	
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	3050B	
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	3050B	
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	3050B	
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	3050B	
MB 500-450335/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-450335/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-151344-1 MS	2615V-118-B09 (0-5)	Total/NA	Solid	3050B	
500-151344-1 MSD	2615V-118-B09 (0-5)	Total/NA	Solid	3050B	
500-151344-1 DU	2615V-118-B09 (0-5)	Total/NA	Solid	3050B	

Prep Batch: 450347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	3050B	
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	3050B	
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	3050B	
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	3050B	
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	3050B	
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	3050B	
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	3050B	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Prep Batch: 450347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	3050B	
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	3050B	
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	3050B	
MB 500-450347/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-450347/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-151344-23 MS	2615V-118-B10 (0-5)	Total/NA	Solid	3050B	
500-151344-23 MSD	2615V-118-B10 (0-5)	Total/NA	Solid	3050B	
500-151344-23 DU	2615V-118-B10 (0-5)	Total/NA	Solid	3050B	

Prep Batch: 450389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	SPLP East	Solid	3010A	450136
500-151344-2	2615V-118-B09 (5-10)	SPLP East	Solid	3010A	450136
500-151344-3	2615V-118-B09 (10-15)	SPLP East	Solid	3010A	450136
500-151344-4	2615V-118-B09 (15-23)	SPLP East	Solid	3010A	450136
500-151344-5	2615V-118-B09 (23-31)	SPLP East	Solid	3010A	450136
500-151344-6	2615V-118-B09 (31-39)	SPLP East	Solid	3010A	450136
500-151344-7	2615V-118-B09 (39-47)	SPLP East	Solid	3010A	450136
500-151344-8	2615V-118-B35 (0-5)	SPLP East	Solid	3010A	450136
500-151344-9	2615V-118-B35 (5-10)	SPLP East	Solid	3010A	450136
500-151344-10	2615V-118-B35 (10-15)	SPLP East	Solid	3010A	450136
500-151344-11	2615V-118-B35 (15-23)	SPLP East	Solid	3010A	450136
500-151344-12	2615V-118-B35 (23-31)	SPLP East	Solid	3010A	450136
500-151344-13	2615V-118-B35 (31-39)	SPLP East	Solid	3010A	450136
500-151344-14	2615V-118-B35 (39-47)	SPLP East	Solid	3010A	450136
500-151344-15	2615V-118-B12 (0-5)	SPLP East	Solid	3010A	450136
500-151344-16	2615V-118-B12 (5-10)	SPLP East	Solid	3010A	450136
500-151344-17	2615V-118-B12 (5-10) D	SPLP East	Solid	3010A	450136
500-151344-18	2615V-118-B12 (10-15)	SPLP East	Solid	3010A	450136
500-151344-19	2615V-118-B12 (15-23)	SPLP East	Solid	3010A	450136
500-151344-20	2615V-118-B12 (23-31)	SPLP East	Solid	3010A	450136
LB 500-450136/1-B	Method Blank	SPLP East	Solid	3010A	450136
LCS 500-450389/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-151344-20 MS	2615V-118-B12 (23-31)	SPLP East	Solid	3010A	450136
500-151344-20 DU	2615V-118-B12 (23-31)	SPLP East	Solid	3010A	450136

Prep Batch: 450390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	SPLP East	Solid	3010A	450137
500-151344-22	2615V-118-B12 (39-47)	SPLP East	Solid	3010A	450137
500-151344-23	2615V-118-B10 (0-5)	SPLP East	Solid	3010A	450137
500-151344-24	2615V-118-B10 (5-10)	SPLP East	Solid	3010A	450137
500-151344-25	2615V-118-B10 (10-15)	SPLP East	Solid	3010A	450137
500-151344-26	2615V-118-B10 (15-23)	SPLP East	Solid	3010A	450137
500-151344-27	2615V-118-B10 (23-31)	SPLP East	Solid	3010A	450137
500-151344-28	2615V-118-B10 (31-39)	SPLP East	Solid	3010A	450137
500-151344-29	2615V-118-B10 (39-47)	SPLP East	Solid	3010A	450137
500-151344-30	2615V-118-B10 (39-47) D	SPLP East	Solid	3010A	450137
LB 500-450137/1-B	Method Blank	SPLP East	Solid	3010A	450137
LCS 500-450390/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-151344-30 MS	2615V-118-B10 (39-47) D	SPLP East	Solid	3010A	450137

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Prep Batch: 450390 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-30 DU	2615V-118-B10 (39-47) D	SPLP East	Solid	3010A	450137

Prep Batch: 450391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	3010A	450138
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	3010A	450138
500-151344-3	2615V-118-B09 (10-15)	TCLP	Solid	3010A	450138
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	3010A	450139
500-151344-5	2615V-118-B09 (23-31)	TCLP	Solid	3010A	450138
500-151344-6	2615V-118-B09 (31-39)	TCLP	Solid	3010A	450138
500-151344-7	2615V-118-B09 (39-47)	TCLP	Solid	3010A	450138
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	3010A	450138
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	3010A	450138
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	3010A	450138
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	3010A	450138
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	3010A	450138
500-151344-13	2615V-118-B35 (31-39)	TCLP	Solid	3010A	450138
500-151344-14	2615V-118-B35 (39-47)	TCLP	Solid	3010A	450138
500-151344-15	2615V-118-B12 (0-5)	TCLP	Solid	3010A	450138
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	3010A	450138
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	3010A	450138
500-151344-18	2615V-118-B12 (10-15)	TCLP	Solid	3010A	450138
500-151344-19	2615V-118-B12 (15-23)	TCLP	Solid	3010A	450138
500-151344-20	2615V-118-B12 (23-31)	TCLP	Solid	3010A	450138
LB 500-450138/1-B	Method Blank	TCLP	Solid	3010A	450138
LB2 500-450139/1-C	Method Blank	TCLP	Solid	3010A	450139
LCS 500-450391/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-151344-7 MS	2615V-118-B09 (39-47)	TCLP	Solid	3010A	450138
500-151344-7 DU	2615V-118-B09 (39-47)	TCLP	Solid	3010A	450138

Prep Batch: 450393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	3010A	450140
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	3010A	450140
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	3010A	450140
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	3010A	450140
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	3010A	450140
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	3010A	450140
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	3010A	450140
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	3010A	450140
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	3010A	450140
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	3010A	450140
LB 500-450140/1-C	Method Blank	TCLP	Solid	3010A	450140
LCS 500-450393/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 450431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	7470A	450263
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	7470A	450273
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	7470A	450273
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	7470A	450273

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 450431 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	7470A	450273
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	7470A	450273
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	7470A	450273
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	7470A	450273
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	7470A	450273
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	7470A	450273
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	7470A	450273
LB 500-450140/1-B	Method Blank	TCLP	Solid	7470A	450273
LB2 500-450139/1-B	Method Blank	TCLP	Solid	7470A	450263
MB 500-450263/12-A	Method Blank	Total/NA	Solid	7470A	450263
MB 500-450273/12-A	Method Blank	Total/NA	Solid	7470A	450273
LCS 500-450263/13-A	Lab Control Sample	Total/NA	Solid	7470A	450263
LCS 500-450273/13-A	Lab Control Sample	Total/NA	Solid	7470A	450273
500-151344-24 MS	2615V-118-B10 (5-10)	TCLP	Solid	7470A	450273
500-151344-24 DU	2615V-118-B10 (5-10)	TCLP	Solid	7470A	450273

Prep Batch: 450441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	7470A	450138
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	7470A	450138
500-151344-3	2615V-118-B09 (10-15)	TCLP	Solid	7470A	450138
500-151344-5	2615V-118-B09 (23-31)	TCLP	Solid	7470A	450138
500-151344-6	2615V-118-B09 (31-39)	TCLP	Solid	7470A	450138
500-151344-7	2615V-118-B09 (39-47)	TCLP	Solid	7470A	450138
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	7470A	450138
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	7470A	450138
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	7470A	450138
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	7470A	450138
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	7470A	450138
500-151344-13	2615V-118-B35 (31-39)	TCLP	Solid	7470A	450138
500-151344-14	2615V-118-B35 (39-47)	TCLP	Solid	7470A	450138
500-151344-15	2615V-118-B12 (0-5)	TCLP	Solid	7470A	450138
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	7470A	450138
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	7470A	450138
500-151344-18	2615V-118-B12 (10-15)	TCLP	Solid	7470A	450138
500-151344-19	2615V-118-B12 (15-23)	TCLP	Solid	7470A	450138
500-151344-20	2615V-118-B12 (23-31)	TCLP	Solid	7470A	450138
LB 500-450138/1-C	Method Blank	TCLP	Solid	7470A	450138
MB 500-450441/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-450441/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-151344-10 MS	2615V-118-B35 (10-15)	TCLP	Solid	7470A	450138
500-151344-10 DU	2615V-118-B35 (10-15)	TCLP	Solid	7470A	450138

Analysis Batch: 450589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	SPLP East	Solid	6010B	450389
500-151344-2	2615V-118-B09 (5-10)	SPLP East	Solid	6010B	450389
500-151344-3	2615V-118-B09 (10-15)	SPLP East	Solid	6010B	450389
500-151344-4	2615V-118-B09 (15-23)	SPLP East	Solid	6010B	450389
500-151344-5	2615V-118-B09 (23-31)	SPLP East	Solid	6010B	450389
500-151344-6	2615V-118-B09 (31-39)	SPLP East	Solid	6010B	450389

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 450589 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-7	2615V-118-B09 (39-47)	SPLP East	Solid	6010B	450389
500-151344-8	2615V-118-B35 (0-5)	SPLP East	Solid	6010B	450389
500-151344-9	2615V-118-B35 (5-10)	SPLP East	Solid	6010B	450389
500-151344-10	2615V-118-B35 (10-15)	SPLP East	Solid	6010B	450389
500-151344-11	2615V-118-B35 (15-23)	SPLP East	Solid	6010B	450389
500-151344-12	2615V-118-B35 (23-31)	SPLP East	Solid	6010B	450389
500-151344-13	2615V-118-B35 (31-39)	SPLP East	Solid	6010B	450389
500-151344-14	2615V-118-B35 (39-47)	SPLP East	Solid	6010B	450389
500-151344-15	2615V-118-B12 (0-5)	SPLP East	Solid	6010B	450389
500-151344-16	2615V-118-B12 (5-10)	SPLP East	Solid	6010B	450389
500-151344-17	2615V-118-B12 (5-10) D	SPLP East	Solid	6010B	450389
500-151344-18	2615V-118-B12 (10-15)	SPLP East	Solid	6010B	450389
500-151344-19	2615V-118-B12 (15-23)	SPLP East	Solid	6010B	450389
500-151344-20	2615V-118-B12 (23-31)	SPLP East	Solid	6010B	450389
500-151344-21	2615V-118-B12 (31-39)	SPLP East	Solid	6010B	450390
500-151344-22	2615V-118-B12 (39-47)	SPLP East	Solid	6010B	450390
500-151344-23	2615V-118-B10 (0-5)	SPLP East	Solid	6010B	450390
500-151344-24	2615V-118-B10 (5-10)	SPLP East	Solid	6010B	450390
500-151344-25	2615V-118-B10 (10-15)	SPLP East	Solid	6010B	450390
500-151344-26	2615V-118-B10 (15-23)	SPLP East	Solid	6010B	450390
500-151344-27	2615V-118-B10 (23-31)	SPLP East	Solid	6010B	450390
500-151344-28	2615V-118-B10 (31-39)	SPLP East	Solid	6010B	450390
500-151344-29	2615V-118-B10 (39-47)	SPLP East	Solid	6010B	450390
500-151344-30	2615V-118-B10 (39-47) D	SPLP East	Solid	6010B	450390
LB 500-450136/1-B	Method Blank	SPLP East	Solid	6010B	450389
LB 500-450137/1-B	Method Blank	SPLP East	Solid	6010B	450390
LCS 500-450389/2-A	Lab Control Sample	Total/NA	Solid	6010B	450389
LCS 500-450390/2-A	Lab Control Sample	Total/NA	Solid	6010B	450390
500-151344-20 MS	2615V-118-B12 (23-31)	SPLP East	Solid	6010B	450389
500-151344-30 MS	2615V-118-B10 (39-47) D	SPLP East	Solid	6010B	450390
500-151344-20 DU	2615V-118-B12 (23-31)	SPLP East	Solid	6010B	450389
500-151344-30 DU	2615V-118-B10 (39-47) D	SPLP East	Solid	6010B	450390

Analysis Batch: 450602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	6010B	450347
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	6010B	450347
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	6010B	450347
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	6010B	450347
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	6010B	450347
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	6010B	450347
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	6010B	450347
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	6010B	450347
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	6010B	450347
MB 500-450347/1-A	Method Blank	Total/NA	Solid	6010B	450347
LCS 500-450347/2-A	Lab Control Sample	Total/NA	Solid	6010B	450347
500-151344-23 MS	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347
500-151344-23 MSD	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347
500-151344-23 DU	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 450647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	6020A	450391
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	6020A	450391
500-151344-3	2615V-118-B09 (10-15)	TCLP	Solid	6020A	450391
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	6020A	450391
500-151344-5	2615V-118-B09 (23-31)	TCLP	Solid	6020A	450391
500-151344-6	2615V-118-B09 (31-39)	TCLP	Solid	6020A	450391
500-151344-7	2615V-118-B09 (39-47)	TCLP	Solid	6020A	450391
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	6020A	450391
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	6020A	450391
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	6020A	450391
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	6020A	450391
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	6020A	450391
500-151344-13	2615V-118-B35 (31-39)	TCLP	Solid	6020A	450391
500-151344-14	2615V-118-B35 (39-47)	TCLP	Solid	6020A	450391
500-151344-15	2615V-118-B12 (0-5)	TCLP	Solid	6020A	450391
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	6020A	450391
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	6020A	450391
500-151344-18	2615V-118-B12 (10-15)	TCLP	Solid	6020A	450391
500-151344-19	2615V-118-B12 (15-23)	TCLP	Solid	6020A	450391
500-151344-20	2615V-118-B12 (23-31)	TCLP	Solid	6020A	450391
LB 500-450138/1-B	Method Blank	TCLP	Solid	6020A	450391
LB2 500-450139/1-C	Method Blank	TCLP	Solid	6020A	450391
LCS 500-450391/2-A	Lab Control Sample	Total/NA	Solid	6020A	450391
500-151344-7 MS	2615V-118-B09 (39-47)	TCLP	Solid	6020A	450391
500-151344-7 DU	2615V-118-B09 (39-47)	TCLP	Solid	6020A	450391

Analysis Batch: 450661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	7470A	450441
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	7470A	450441
500-151344-3	2615V-118-B09 (10-15)	TCLP	Solid	7470A	450441
500-151344-5	2615V-118-B09 (23-31)	TCLP	Solid	7470A	450441
500-151344-6	2615V-118-B09 (31-39)	TCLP	Solid	7470A	450441
500-151344-7	2615V-118-B09 (39-47)	TCLP	Solid	7470A	450441
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	7470A	450441
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	7470A	450441
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	7470A	450441
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	7470A	450441
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	7470A	450441
500-151344-13	2615V-118-B35 (31-39)	TCLP	Solid	7470A	450441
500-151344-14	2615V-118-B35 (39-47)	TCLP	Solid	7470A	450441
500-151344-15	2615V-118-B12 (0-5)	TCLP	Solid	7470A	450441
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	7470A	450441
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	7470A	450441
500-151344-18	2615V-118-B12 (10-15)	TCLP	Solid	7470A	450441
500-151344-19	2615V-118-B12 (15-23)	TCLP	Solid	7470A	450441
500-151344-20	2615V-118-B12 (23-31)	TCLP	Solid	7470A	450441
LB 500-450138/1-C	Method Blank	TCLP	Solid	7470A	450441
MB 500-450441/12-A	Method Blank	Total/NA	Solid	7470A	450441
LCS 500-450441/13-A	Lab Control Sample	Total/NA	Solid	7470A	450441
500-151344-10 MS	2615V-118-B35 (10-15)	TCLP	Solid	7470A	450441

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 450661 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-10 DU	2615V-118-B35 (10-15)	TCLP	Solid	7470A	450441

Prep Batch: 450696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	7471B	
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	7471B	
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	7471B	
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	7471B	
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	7471B	
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	7471B	
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	7471B	
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	7471B	
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	7471B	
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	7471B	
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	7471B	
MB 500-450696/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-450696/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-151344-3 MS	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	
500-151344-3 MSD	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	
500-151344-3 DU	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	

Analysis Batch: 450844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	6010B	450391
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	6010B	450391
500-151344-3	2615V-118-B09 (10-15)	TCLP	Solid	6010B	450391
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	6010B	450391
500-151344-5	2615V-118-B09 (23-31)	TCLP	Solid	6010B	450391
500-151344-6	2615V-118-B09 (31-39)	TCLP	Solid	6010B	450391
500-151344-7	2615V-118-B09 (39-47)	TCLP	Solid	6010B	450391
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	6010B	450391
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	6010B	450391
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	6010B	450391
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	6010B	450391
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	6010B	450391
500-151344-13	2615V-118-B35 (31-39)	TCLP	Solid	6010B	450391
500-151344-14	2615V-118-B35 (39-47)	TCLP	Solid	6010B	450391
500-151344-15	2615V-118-B12 (0-5)	TCLP	Solid	6010B	450391
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	6010B	450391
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	6010B	450391
500-151344-18	2615V-118-B12 (10-15)	TCLP	Solid	6010B	450391
500-151344-19	2615V-118-B12 (15-23)	TCLP	Solid	6010B	450391
500-151344-20	2615V-118-B12 (23-31)	TCLP	Solid	6010B	450391
LB 500-450138/1-B	Method Blank	TCLP	Solid	6010B	450391
LB2 500-450139/1-C	Method Blank	TCLP	Solid	6010B	450391
LCS 500-450391/2-A	Lab Control Sample	Total/NA	Solid	6010B	450391
500-151344-7 MS	2615V-118-B09 (39-47)	TCLP	Solid	6010B	450391
500-151344-7 DU	2615V-118-B09 (39-47)	TCLP	Solid	6010B	450391

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 450894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	6020A	450393
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	6020A	450393
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	6020A	450393
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	6020A	450393
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	6020A	450393
LB 500-450140/1-C	Method Blank	TCLP	Solid	6020A	450393
LCS 500-450393/2-A	Lab Control Sample	Total/NA	Solid	6020A	450393

Analysis Batch: 450908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	6010B	450347
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	6010B	450347
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	6010B	450347
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	6010B	450347
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	6010B	450347
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	6010B	450347
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	6010B	450347
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	6010B	450347
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	6010B	450347
500-151344-23 MS	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347
500-151344-23 MSD	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347
500-151344-23 DU	2615V-118-B10 (0-5)	Total/NA	Solid	6010B	450347

Analysis Batch: 450909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	6010B	450335
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	6010B	450335
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	6010B	450335
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	6010B	450335
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	6010B	450335
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	6010B	450335
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	6010B	450335
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	6010B	450335
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	6010B	450335
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	6010B	450335
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	6010B	450335
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	6010B	450335
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	6010B	450335
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	6010B	450335
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	6010B	450335
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	6010B	450335
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	6010B	450335
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	6010B	450335
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	6010B	450335
MB 500-450335/1-A	Method Blank	Total/NA	Solid	6010B	450335
LCS 500-450335/2-A	Lab Control Sample	Total/NA	Solid	6010B	450335
500-151344-1 MS	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 MSD	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 DU	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Prep Batch: 450927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	7471B	
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	7471B	
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	7471B	
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	7471B	
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	7471B	
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	7471B	
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	7471B	
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	7471B	
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	7471B	
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	7471B	
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	7471B	
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	7471B	
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	7471B	
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	7471B	
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	7471B	
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	7471B	
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	7471B	
MB 500-450927/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-450927/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-151344-22 MS	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	
500-151344-22 MSD	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	
500-151344-22 DU	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	

Analysis Batch: 450953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	7471B	450696
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	7471B	450696
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	450696
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	7471B	450696
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	7471B	450696
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	7471B	450696
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	7471B	450696
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	7471B	450696
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	7471B	450696
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	7471B	450696
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	7471B	450696
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	7471B	450696
MB 500-450696/12-A	Method Blank	Total/NA	Solid	7471B	450696
LCS 500-450696/13-A	Lab Control Sample	Total/NA	Solid	7471B	450696
500-151344-3 MS	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	450696
500-151344-3 MSD	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	450696
500-151344-3 DU	2615V-118-B09 (10-15)	Total/NA	Solid	7471B	450696

Analysis Batch: 450964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	6020A	450393
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	6020A	450393
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	6020A	450393
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	6020A	450393
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	6020A	450393

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 451042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	TCLP	Solid	6010B	450391
500-151344-2	2615V-118-B09 (5-10)	TCLP	Solid	6010B	450391
500-151344-4	2615V-118-B09 (15-23)	TCLP	Solid	6010B	450391
500-151344-8	2615V-118-B35 (0-5)	TCLP	Solid	6010B	450391
500-151344-9	2615V-118-B35 (5-10)	TCLP	Solid	6010B	450391
500-151344-10	2615V-118-B35 (10-15)	TCLP	Solid	6010B	450391
500-151344-11	2615V-118-B35 (15-23)	TCLP	Solid	6010B	450391
500-151344-12	2615V-118-B35 (23-31)	TCLP	Solid	6010B	450391
500-151344-16	2615V-118-B12 (5-10)	TCLP	Solid	6010B	450391
500-151344-17	2615V-118-B12 (5-10) D	TCLP	Solid	6010B	450391
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	6010B	450393
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	6010B	450393
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	6010B	450393
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	6010B	450393
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	6010B	450393
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	6010B	450393
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	6010B	450393
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	6010B	450393
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	6010B	450393
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	6010B	450393
LB 500-450140/1-C	Method Blank	TCLP	Solid	6010B	450393
LCS 500-450393/2-A	Lab Control Sample	Total/NA	Solid	6010B	450393

Analysis Batch: 451171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	7471B	450927
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	7471B	450927
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	7471B	450927
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	7471B	450927
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	7471B	450927
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	7471B	450927
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	7471B	450927
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	7471B	450927
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	7471B	450927
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	450927
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	7471B	450927
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	7471B	450927
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	7471B	450927
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	7471B	450927
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	7471B	450927
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	7471B	450927
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	7471B	450927
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	7471B	450927
MB 500-450927/12-A	Method Blank	Total/NA	Solid	7471B	450927
LCS 500-450927/13-A	Lab Control Sample	Total/NA	Solid	7471B	450927
500-151344-22 MS	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	450927
500-151344-22 MSD	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	450927
500-151344-22 DU	2615V-118-B12 (39-47)	Total/NA	Solid	7471B	450927

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 451249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	6010B	450335
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	6010B	450335
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	6010B	450335
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	6010B	450335
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	6010B	450335
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	6010B	450335
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	6010B	450335
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	6010B	450335
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	6010B	450335
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	6010B	450335
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	6010B	450335
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	6010B	450335
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	6010B	450335
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	6010B	450335
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	6010B	450335
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	6010B	450335
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	6010B	450335
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	6010B	450335
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	6010B	450335
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	6010B	450335
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	6010B	450335
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	6010B	450335
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	6010B	450335
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	6010B	450335
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	6010B	450335
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	6010B	450335
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	6010B	450335
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	6010B	450335
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	6010B	450335
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	6010B	450335
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	6010B	450335
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	6010B	450335
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	6010B	450335
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	6010B	450335
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	6010B	450335
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	6010B	450335
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	6010B	450335
MB 500-450335/1-A	Method Blank	Total/NA	Solid	6010B	450335
LCS 500-450335/2-A	Lab Control Sample	Total/NA	Solid	6010B	450335
500-151344-1 MS	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 MS	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 MSD	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 MSD	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 DU	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335
500-151344-1 DU	2615V-118-B09 (0-5)	Total/NA	Solid	6010B	450335

Analysis Batch: 451252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	TCLP	Solid	6010B	450393

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Metals (Continued)

Analysis Batch: 451252 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-22	2615V-118-B12 (39-47)	TCLP	Solid	6010B	450393
500-151344-23	2615V-118-B10 (0-5)	TCLP	Solid	6010B	450393
500-151344-24	2615V-118-B10 (5-10)	TCLP	Solid	6010B	450393
500-151344-25	2615V-118-B10 (10-15)	TCLP	Solid	6010B	450393
500-151344-26	2615V-118-B10 (15-23)	TCLP	Solid	6010B	450393
500-151344-27	2615V-118-B10 (23-31)	TCLP	Solid	6010B	450393
500-151344-28	2615V-118-B10 (31-39)	TCLP	Solid	6010B	450393
500-151344-29	2615V-118-B10 (39-47)	TCLP	Solid	6010B	450393
500-151344-30	2615V-118-B10 (39-47) D	TCLP	Solid	6010B	450393
LB 500-450140/1-C	Method Blank	TCLP	Solid	6010B	450393
LCS 500-450393/2-A	Lab Control Sample	Total/NA	Solid	6010B	450393

General Chemistry

Analysis Batch: 450246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	Moisture	
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	Moisture	
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	Moisture	
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	Moisture	
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	Moisture	
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	Moisture	
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	Moisture	
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	Moisture	
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	Moisture	
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	Moisture	
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	Moisture	
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	Moisture	
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	Moisture	
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	Moisture	
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	Moisture	
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	Moisture	
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	Moisture	
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	Moisture	
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	Moisture	
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	Moisture	
500-151344-2 DU	2615V-118-B09 (5-10)	Total/NA	Solid	Moisture	

Analysis Batch: 450247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	Moisture	
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	Moisture	
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	Moisture	
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	Moisture	
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	Moisture	
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	Moisture	
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	Moisture	
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	Moisture	
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	Moisture	
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	Moisture	

TestAmerica Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

General Chemistry (Continued)

Analysis Batch: 450247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-21 DU	2615V-118-B12 (31-39)	Total/NA	Solid	Moisture	

Analysis Batch: 450947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-151344-1	2615V-118-B09 (0-5)	Total/NA	Solid	9045D	
500-151344-2	2615V-118-B09 (5-10)	Total/NA	Solid	9045D	
500-151344-3	2615V-118-B09 (10-15)	Total/NA	Solid	9045D	
500-151344-4	2615V-118-B09 (15-23)	Total/NA	Solid	9045D	
500-151344-5	2615V-118-B09 (23-31)	Total/NA	Solid	9045D	
500-151344-6	2615V-118-B09 (31-39)	Total/NA	Solid	9045D	
500-151344-7	2615V-118-B09 (39-47)	Total/NA	Solid	9045D	
500-151344-8	2615V-118-B35 (0-5)	Total/NA	Solid	9045D	
500-151344-9	2615V-118-B35 (5-10)	Total/NA	Solid	9045D	
500-151344-10	2615V-118-B35 (10-15)	Total/NA	Solid	9045D	
500-151344-11	2615V-118-B35 (15-23)	Total/NA	Solid	9045D	
500-151344-12	2615V-118-B35 (23-31)	Total/NA	Solid	9045D	
500-151344-13	2615V-118-B35 (31-39)	Total/NA	Solid	9045D	
500-151344-14	2615V-118-B35 (39-47)	Total/NA	Solid	9045D	
500-151344-15	2615V-118-B12 (0-5)	Total/NA	Solid	9045D	
500-151344-16	2615V-118-B12 (5-10)	Total/NA	Solid	9045D	
500-151344-17	2615V-118-B12 (5-10) D	Total/NA	Solid	9045D	
500-151344-18	2615V-118-B12 (10-15)	Total/NA	Solid	9045D	
500-151344-19	2615V-118-B12 (15-23)	Total/NA	Solid	9045D	
500-151344-20	2615V-118-B12 (23-31)	Total/NA	Solid	9045D	
500-151344-21	2615V-118-B12 (31-39)	Total/NA	Solid	9045D	
500-151344-22	2615V-118-B12 (39-47)	Total/NA	Solid	9045D	
500-151344-23	2615V-118-B10 (0-5)	Total/NA	Solid	9045D	
500-151344-24	2615V-118-B10 (5-10)	Total/NA	Solid	9045D	
500-151344-25	2615V-118-B10 (10-15)	Total/NA	Solid	9045D	
500-151344-26	2615V-118-B10 (15-23)	Total/NA	Solid	9045D	
500-151344-27	2615V-118-B10 (23-31)	Total/NA	Solid	9045D	
500-151344-28	2615V-118-B10 (31-39)	Total/NA	Solid	9045D	
500-151344-29	2615V-118-B10 (39-47)	Total/NA	Solid	9045D	
500-151344-30	2615V-118-B10 (39-47) D	Total/NA	Solid	9045D	
500-151344-20 DU	2615V-118-B12 (23-31)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(75-131)	(75-126)	(70-134)	(75-124)
500-151344-1	2615V-118-B09 (0-5)	101	114	97	100
500-151344-2	2615V-118-B09 (5-10)	110	111	94	101
500-151344-3	2615V-118-B09 (10-15)	104	113	95	90
500-151344-4	2615V-118-B09 (15-23)	96	111	94	100
500-151344-5	2615V-118-B09 (23-31)	97	120	99	97
500-151344-6	2615V-118-B09 (31-39)	97	99	93	96
500-151344-7	2615V-118-B09 (39-47)	96	113	96	99
500-151344-8	2615V-118-B35 (0-5)	98	114	97	99
500-151344-9	2615V-118-B35 (5-10)	104	105	96	100
500-151344-10	2615V-118-B35 (10-15)	105	106	95	100
500-151344-11	2615V-118-B35 (15-23)	106	104	94	101
500-151344-12	2615V-118-B35 (23-31)	114	104	95	105
500-151344-13	2615V-118-B35 (31-39)	103	103	94	101
500-151344-14	2615V-118-B35 (39-47)	104	103	95	99
500-151344-15	2615V-118-B12 (0-5)	98	106	97	97
500-151344-16	2615V-118-B12 (5-10)	120	105	96	103
500-151344-17	2615V-118-B12 (5-10) D	114	105	95	102
500-151344-18	2615V-118-B12 (10-15)	101	104	94	99
500-151344-19	2615V-118-B12 (15-23)	102	104	94	100
500-151344-20	2615V-118-B12 (23-31)	102	106	95	100
500-151344-21	2615V-118-B12 (31-39)	102	105	96	99
500-151344-22	2615V-118-B12 (39-47)	102	104	95	99
500-151344-23	2615V-118-B10 (0-5)	101	106	97	95
500-151344-24	2615V-118-B10 (5-10)	100	108	96	100
500-151344-25	2615V-118-B10 (10-15)	105	106	94	100
500-151344-26	2615V-118-B10 (15-23)	102	105	93	101
500-151344-27	2615V-118-B10 (23-31)	98	107	94	99
500-151344-28	2615V-118-B10 (31-39)	103	103	96	99
500-151344-29	2615V-118-B10 (39-47)	165 * X	108	97	119
500-151344-30	2615V-118-B10 (39-47) D	122 *	115	96	106
LCS 500-450605/4	Lab Control Sample	91	109	87	98
LCS 500-450606/4	Lab Control Sample	92	103	86	98
LCS 500-450699/27	Lab Control Sample	94	103	87	97
LCS 500-450856/4	Lab Control Sample	89	111	93	100
LCSD 500-450605/25	Lab Control Sample Dup	90	109	94	102
LCSD 500-450606/5	Lab Control Sample Dup	93	103	90	97
LCSD 500-450699/28	Lab Control Sample Dup	94	101	86	97
LCSD 500-450856/5	Lab Control Sample Dup	89	112	93	99
MB 500-450605/6	Method Blank	96	112	98	99
MB 500-450606/6	Method Blank	98	102	90	98
MB 500-450699/5	Method Blank	97	100	90	96
MB 500-450856/6	Method Blank	91	111	98	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (46-133)	PHL (46-125)	NBZ (41-120)	FBP (44-121)	TBP (25-139)	TPHL (35-160)
500-151344-1	2615V-118-B09 (0-5)	96	90	78	86	69	88
500-151344-1 - DL	2615V-118-B09 (0-5)	91	83	72	83	64	80
500-151344-2	2615V-118-B09 (5-10)	117	109	95	105	79	106
500-151344-3	2615V-118-B09 (10-15)	120	115	84	90	72	91
500-151344-4	2615V-118-B09 (15-23)	121	112	97	107	72	106
500-151344-5	2615V-118-B09 (23-31)	111	100	88	99	69	93
500-151344-6	2615V-118-B09 (31-39)	125	114	101	109	79	104
500-151344-7	2615V-118-B09 (39-47)	131	125	96	95	76	98
500-151344-8	2615V-118-B35 (0-5)	110	103	92	102	78	98
500-151344-9	2615V-118-B35 (5-10)	117	109	98	107	80	99
500-151344-10	2615V-118-B35 (10-15)	112	104	96	104	70	101
500-151344-11	2615V-118-B35 (15-23)	112	105	92	102	75	96
500-151344-12	2615V-118-B35 (23-31)	117	108	93	104	82	99
500-151344-13	2615V-118-B35 (31-39)	115	106	93	106	76	100
500-151344-14	2615V-118-B35 (39-47)	113	106	93	100	70	100
500-151344-15	2615V-118-B12 (0-5)	118	108	94	105	89	97
500-151344-16	2615V-118-B12 (5-10)	95	94	111	108	91	101
500-151344-17	2615V-118-B12 (5-10) D	90	87	105	104	83	98
500-151344-18	2615V-118-B12 (10-15)	101	99	115	118	102	109
500-151344-19	2615V-118-B12 (15-23)	66	58	48	58	37	68
500-151344-19 MS	2615V-118-B12 (15-23)	96	99	69	82	77	115
500-151344-19 MSD	2615V-118-B12 (15-23)	109	108	91	99	93	153
500-151344-20	2615V-118-B12 (23-31)	73	73	61	70	69	86
500-151344-21	2615V-118-B12 (31-39)	109	108	78	91	65	102
500-151344-22	2615V-118-B12 (39-47)	96	92	74	86	86	106
500-151344-23	2615V-118-B10 (0-5)	112	105	87	99	91	99
500-151344-24	2615V-118-B10 (5-10)	80	82	67	83	81	105
500-151344-25	2615V-118-B10 (10-15)	106	109	86	102	82	109
500-151344-26	2615V-118-B10 (15-23)	107	101	75	92	84	117
500-151344-27	2615V-118-B10 (23-31)	118	114	100	111	60	110
500-151344-28	2615V-118-B10 (31-39)	123	119	99	111	75	114
500-151344-29	2615V-118-B10 (39-47)	122	121	100	108	71	114
500-151344-30	2615V-118-B10 (39-47) D	110	108	93	104	61	114
LCS 500-450775/2-A	Lab Control Sample	128	109	99	93	99	92
LCS 500-450787/2-A	Lab Control Sample	136 X	119	104	96	99	92
LCS 500-450846/2-A	Lab Control Sample	123	104	94	88	94	86
LCS 500-451519/2-A	Lab Control Sample	124	120	92	91	93	102
MB 500-450775/1-A	Method Blank	130	114	89	90	85	87
MB 500-450787/1-A	Method Blank	147 X	130 X	94	94	83	89
MB 500-450846/1-A	Method Blank	131	113	86	90	82	83
MB 500-451519/1-A	Method Blank	116	108	86	90	27	98

Surrogate Legend

- 2FP = 2-Fluorophenol
- PHL = Phenol-d5
- NBZ = Nitrobenzene-d5
- FBP = 2-Fluorobiphenyl
- TBP = 2,4,6-Tribromophenol
- TPHL = Terphenyl-d14

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-450605/6

Matrix: Solid

Analysis Batch: 450605

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			09/19/18 10:57	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			09/19/18 10:57	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			09/19/18 10:57	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			09/19/18 10:57	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			09/19/18 10:57	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			09/19/18 10:57	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			09/19/18 10:57	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			09/19/18 10:57	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			09/19/18 10:57	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			09/19/18 10:57	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 10:57	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			09/19/18 10:57	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			09/19/18 10:57	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			09/19/18 10:57	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			09/19/18 10:57	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 10:57	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			09/19/18 10:57	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 10:57	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			09/19/18 10:57	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			09/19/18 10:57	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			09/19/18 10:57	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			09/19/18 10:57	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			09/19/18 10:57	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			09/19/18 10:57	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			09/19/18 10:57	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			09/19/18 10:57	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			09/19/18 10:57	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/19/18 10:57	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			09/19/18 10:57	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			09/19/18 10:57	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			09/19/18 10:57	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			09/19/18 10:57	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			09/19/18 10:57	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/19/18 10:57	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			09/19/18 10:57	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			09/19/18 10:57	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			09/19/18 10:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		75 - 131		09/19/18 10:57	1
Dibromofluoromethane	112		75 - 126		09/19/18 10:57	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 134		09/19/18 10:57	1
Toluene-d8 (Surr)	99		75 - 124		09/19/18 10:57	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450605/4

Matrix: Solid

Analysis Batch: 450605

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0626		mg/Kg		125	40 - 150
Benzene	0.0500	0.0486		mg/Kg		97	70 - 125
Bromodichloromethane	0.0500	0.0479		mg/Kg		96	67 - 129
Bromoform	0.0500	0.0483		mg/Kg		97	68 - 136
Bromomethane	0.0500	0.0441		mg/Kg		88	70 - 130
2-Butanone (MEK)	0.0500	0.0661		mg/Kg		132	47 - 138
Carbon disulfide	0.0500	0.0493		mg/Kg		99	70 - 129
Carbon tetrachloride	0.0500	0.0506		mg/Kg		101	75 - 125
Chlorobenzene	0.0500	0.0485		mg/Kg		97	50 - 150
Chloroethane	0.0500	0.0471		mg/Kg		94	75 - 125
Chloroform	0.0500	0.0502		mg/Kg		100	57 - 135
Chloromethane	0.0500	0.0516		mg/Kg		103	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0502		mg/Kg		100	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0437		mg/Kg		87	70 - 125
Dibromochloromethane	0.0500	0.0415		mg/Kg		83	69 - 125
1,1-Dichloroethane	0.0500	0.0484		mg/Kg		97	70 - 125
1,2-Dichloroethane	0.0500	0.0440		mg/Kg		88	70 - 130
1,1-Dichloroethene	0.0500	0.0550		mg/Kg		110	70 - 120
1,2-Dichloropropane	0.0500	0.0500		mg/Kg		100	70 - 125
Ethylbenzene	0.0500	0.0462		mg/Kg		92	61 - 136
2-Hexanone	0.0500	0.0505		mg/Kg		101	48 - 146
Methylene Chloride	0.0500	0.0458		mg/Kg		92	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0524		mg/Kg		105	50 - 148
Methyl tert-butyl ether	0.0500	0.0460		mg/Kg		92	50 - 140
Styrene	0.0500	0.0446		mg/Kg		89	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0432		mg/Kg		86	70 - 122
Tetrachloroethene	0.0500	0.0498		mg/Kg		100	70 - 124
Toluene	0.0500	0.0464		mg/Kg		93	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0524		mg/Kg		105	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0414		mg/Kg		83	70 - 125
1,1,1-Trichloroethane	0.0500	0.0516		mg/Kg		103	70 - 128
1,1,2-Trichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125
Trichloroethene	0.0500	0.0597		mg/Kg		119	70 - 125
Vinyl acetate	0.0500	0.0567		mg/Kg		113	40 - 153
Vinyl chloride	0.0500	0.0448		mg/Kg		90	70 - 125
Xylenes, Total	0.100	0.0868		mg/Kg		87	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	109		75 - 126
1,2-Dichloroethane-d4 (Surr)	87		70 - 134
Toluene-d8 (Surr)	98		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-450605/25

Matrix: Solid

Analysis Batch: 450605

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0619		mg/Kg		124	40 - 150	1	30
Benzene	0.0500	0.0540		mg/Kg		108	70 - 125	11	30
Bromodichloromethane	0.0500	0.0527		mg/Kg		105	67 - 129	10	30
Bromoform	0.0500	0.0543		mg/Kg		109	68 - 136	12	30
Bromomethane	0.0500	0.0467		mg/Kg		93	70 - 130	6	30
2-Butanone (MEK)	0.0500	0.0651		mg/Kg		130	47 - 138	2	30
Carbon disulfide	0.0500	0.0567		mg/Kg		113	70 - 129	14	30
Carbon tetrachloride	0.0500	0.0594		mg/Kg		119	75 - 125	16	30
Chlorobenzene	0.0500	0.0536		mg/Kg		107	50 - 150	10	30
Chloroethane	0.0500	0.0513		mg/Kg		103	75 - 125	8	30
Chloroform	0.0500	0.0532		mg/Kg		106	57 - 135	6	30
Chloromethane	0.0500	0.0563		mg/Kg		113	70 - 125	9	30
cis-1,2-Dichloroethene	0.0500	0.0548		mg/Kg		110	70 - 125	9	30
cis-1,3-Dichloropropene	0.0500	0.0494		mg/Kg		99	70 - 125	12	30
Dibromochloromethane	0.0500	0.0555		mg/Kg		111	69 - 125	29	30
1,1-Dichloroethane	0.0500	0.0521		mg/Kg		104	70 - 125	8	30
1,2-Dichloroethane	0.0500	0.0495		mg/Kg		99	70 - 130	12	30
1,1-Dichloroethene	0.0500	0.0591		mg/Kg		118	70 - 120	7	30
1,2-Dichloropropane	0.0500	0.0534		mg/Kg		107	70 - 125	7	30
Ethylbenzene	0.0500	0.0506		mg/Kg		101	61 - 136	9	30
2-Hexanone	0.0500	0.0546		mg/Kg		109	48 - 146	8	30
Methylene Chloride	0.0500	0.0547		mg/Kg		109	70 - 126	18	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0563		mg/Kg		113	50 - 148	7	30
Methyl tert-butyl ether	0.0500	0.0466		mg/Kg		93	50 - 140	1	30
Styrene	0.0500	0.0496		mg/Kg		99	70 - 125	11	30
1,1,1,2-Tetrachloroethane	0.0500	0.0459		mg/Kg		92	70 - 122	6	30
Tetrachloroethene	0.0500	0.0611		mg/Kg		122	70 - 124	20	30
Toluene	0.0500	0.0516		mg/Kg		103	70 - 125	11	30
trans-1,2-Dichloroethene	0.0500	0.0570		mg/Kg		114	70 - 125	8	30
trans-1,3-Dichloropropene	0.0500	0.0476		mg/Kg		95	70 - 125	14	30
1,1,1-Trichloroethane	0.0500	0.0547		mg/Kg		109	70 - 128	6	30
1,1,2-Trichloroethane	0.0500	0.0523		mg/Kg		105	70 - 125	15	30
Trichloroethene	0.0500	0.0626		mg/Kg		125	70 - 125	5	30
Vinyl acetate	0.0500	0.0569		mg/Kg		114	40 - 153	0	30
Vinyl chloride	0.0500	0.0497		mg/Kg		99	70 - 125	10	30
Xylenes, Total	0.100	0.0965		mg/Kg		97	53 - 147	11	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	90		75 - 131
Dibromofluoromethane	109		75 - 126
1,2-Dichloroethane-d4 (Surr)	94		70 - 134
Toluene-d8 (Surr)	102		75 - 124

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450606/6

Matrix: Solid

Analysis Batch: 450606

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			09/19/18 10:56	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			09/19/18 10:56	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			09/19/18 10:56	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			09/19/18 10:56	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			09/19/18 10:56	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			09/19/18 10:56	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			09/19/18 10:56	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			09/19/18 10:56	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			09/19/18 10:56	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			09/19/18 10:56	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 10:56	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			09/19/18 10:56	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			09/19/18 10:56	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			09/19/18 10:56	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			09/19/18 10:56	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 10:56	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			09/19/18 10:56	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 10:56	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			09/19/18 10:56	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			09/19/18 10:56	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			09/19/18 10:56	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			09/19/18 10:56	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			09/19/18 10:56	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			09/19/18 10:56	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			09/19/18 10:56	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			09/19/18 10:56	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			09/19/18 10:56	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/19/18 10:56	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			09/19/18 10:56	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			09/19/18 10:56	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			09/19/18 10:56	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			09/19/18 10:56	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			09/19/18 10:56	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/19/18 10:56	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			09/19/18 10:56	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			09/19/18 10:56	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			09/19/18 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 131		09/19/18 10:56	1
Dibromofluoromethane	102		75 - 126		09/19/18 10:56	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		09/19/18 10:56	1
Toluene-d8 (Surr)	98		75 - 124		09/19/18 10:56	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450606/4

Matrix: Solid

Analysis Batch: 450606

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0353		mg/Kg		71	40 - 150
Benzene	0.0500	0.0492		mg/Kg		98	70 - 125
Bromodichloromethane	0.0500	0.0474		mg/Kg		95	67 - 129
Bromoform	0.0500	0.0399		mg/Kg		80	68 - 136
Bromomethane	0.0500	0.0515		mg/Kg		103	70 - 130
2-Butanone (MEK)	0.0500	0.0325		mg/Kg		65	47 - 138
Carbon disulfide	0.0500	0.0485		mg/Kg		97	70 - 129
Carbon tetrachloride	0.0500	0.0514		mg/Kg		103	75 - 125
Chlorobenzene	0.0500	0.0465		mg/Kg		93	50 - 150
Chloroethane	0.0500	0.0406		mg/Kg		81	75 - 125
Chloroform	0.0500	0.0482		mg/Kg		96	57 - 135
Chloromethane	0.0500	0.0460		mg/Kg		92	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0493		mg/Kg		99	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0418		mg/Kg		84	70 - 125
Dibromochloromethane	0.0500	0.0439		mg/Kg		88	69 - 125
1,1-Dichloroethane	0.0500	0.0472		mg/Kg		94	70 - 125
1,2-Dichloroethane	0.0500	0.0452		mg/Kg		90	70 - 130
1,1-Dichloroethene	0.0500	0.0489		mg/Kg		98	70 - 120
1,2-Dichloropropane	0.0500	0.0487		mg/Kg		97	70 - 125
Ethylbenzene	0.0500	0.0466		mg/Kg		93	61 - 136
2-Hexanone	0.0500	0.0309		mg/Kg		62	48 - 146
Methylene Chloride	0.0500	0.0480		mg/Kg		96	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0313		mg/Kg		63	50 - 148
Methyl tert-butyl ether	0.0500	0.0447		mg/Kg		89	50 - 140
Styrene	0.0500	0.0436		mg/Kg		87	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0379		mg/Kg		76	70 - 122
Tetrachloroethene	0.0500	0.0497		mg/Kg		99	70 - 124
Toluene	0.0500	0.0437		mg/Kg		87	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0505		mg/Kg		101	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0407		mg/Kg		81	70 - 125
1,1,1-Trichloroethane	0.0500	0.0493		mg/Kg		99	70 - 128
1,1,2-Trichloroethane	0.0500	0.0408		mg/Kg		82	70 - 125
Trichloroethene	0.0500	0.0545		mg/Kg		109	70 - 125
Vinyl acetate	0.0500	0.0316		mg/Kg		63	40 - 153
Vinyl chloride	0.0500	0.0500		mg/Kg		100	70 - 125
Xylenes, Total	0.100	0.0874		mg/Kg		87	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		75 - 131
Dibromofluoromethane	103		75 - 126
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
Toluene-d8 (Surr)	98		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-450606/5

Matrix: Solid

Analysis Batch: 450606

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0398		mg/Kg		80	40 - 150	12	30
Benzene	0.0500	0.0525		mg/Kg		105	70 - 125	6	30
Bromodichloromethane	0.0500	0.0516		mg/Kg		103	67 - 129	9	30
Bromoform	0.0500	0.0441		mg/Kg		88	68 - 136	10	30
Bromomethane	0.0500	0.0512		mg/Kg		102	70 - 130	0	30
2-Butanone (MEK)	0.0500	0.0351		mg/Kg		70	47 - 138	8	30
Carbon disulfide	0.0500	0.0524		mg/Kg		105	70 - 129	8	30
Carbon tetrachloride	0.0500	0.0545		mg/Kg		109	75 - 125	6	30
Chlorobenzene	0.0500	0.0491		mg/Kg		98	50 - 150	5	30
Chloroethane	0.0500	0.0388		mg/Kg		78	75 - 125	5	30
Chloroform	0.0500	0.0520		mg/Kg		104	57 - 135	8	30
Chloromethane	0.0500	0.0469		mg/Kg		94	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0525		mg/Kg		105	70 - 125	6	30
cis-1,3-Dichloropropene	0.0500	0.0436		mg/Kg		87	70 - 125	4	30
Dibromochloromethane	0.0500	0.0472		mg/Kg		94	69 - 125	7	30
1,1-Dichloroethane	0.0500	0.0508		mg/Kg		102	70 - 125	7	30
1,2-Dichloroethane	0.0500	0.0488		mg/Kg		98	70 - 130	8	30
1,1-Dichloroethene	0.0500	0.0536		mg/Kg		107	70 - 120	9	30
1,2-Dichloropropane	0.0500	0.0518		mg/Kg		104	70 - 125	6	30
Ethylbenzene	0.0500	0.0492		mg/Kg		98	61 - 136	5	30
2-Hexanone	0.0500	0.0345		mg/Kg		69	48 - 146	11	30
Methylene Chloride	0.0500	0.0507		mg/Kg		101	70 - 126	5	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0352		mg/Kg		70	50 - 148	12	30
Methyl tert-butyl ether	0.0500	0.0498		mg/Kg		100	50 - 140	11	30
Styrene	0.0500	0.0458		mg/Kg		92	70 - 125	5	30
1,1,1,2-Tetrachloroethane	0.0500	0.0430		mg/Kg		86	70 - 122	13	30
Tetrachloroethene	0.0500	0.0520		mg/Kg		104	70 - 124	5	30
Toluene	0.0500	0.0465		mg/Kg		93	70 - 125	6	30
trans-1,2-Dichloroethene	0.0500	0.0532		mg/Kg		106	70 - 125	5	30
trans-1,3-Dichloropropene	0.0500	0.0446		mg/Kg		89	70 - 125	9	30
1,1,1-Trichloroethane	0.0500	0.0524		mg/Kg		105	70 - 128	6	30
1,1,2-Trichloroethane	0.0500	0.0444		mg/Kg		89	70 - 125	8	30
Trichloroethene	0.0500	0.0594		mg/Kg		119	70 - 125	8	30
Vinyl acetate	0.0500	0.0358		mg/Kg		72	40 - 153	13	30
Vinyl chloride	0.0500	0.0500		mg/Kg		100	70 - 125	0	30
Xylenes, Total	0.100	0.0917		mg/Kg		92	53 - 147	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	103		75 - 126
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
Toluene-d8 (Surr)	97		75 - 124

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450699/5

Matrix: Solid

Analysis Batch: 450699

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			09/19/18 23:03	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			09/19/18 23:03	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			09/19/18 23:03	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			09/19/18 23:03	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			09/19/18 23:03	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			09/19/18 23:03	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			09/19/18 23:03	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			09/19/18 23:03	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			09/19/18 23:03	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			09/19/18 23:03	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 23:03	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			09/19/18 23:03	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			09/19/18 23:03	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			09/19/18 23:03	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			09/19/18 23:03	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 23:03	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			09/19/18 23:03	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			09/19/18 23:03	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			09/19/18 23:03	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			09/19/18 23:03	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			09/19/18 23:03	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			09/19/18 23:03	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			09/19/18 23:03	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			09/19/18 23:03	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			09/19/18 23:03	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			09/19/18 23:03	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			09/19/18 23:03	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/19/18 23:03	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			09/19/18 23:03	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			09/19/18 23:03	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			09/19/18 23:03	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			09/19/18 23:03	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			09/19/18 23:03	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/19/18 23:03	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			09/19/18 23:03	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			09/19/18 23:03	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			09/19/18 23:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 131		09/19/18 23:03	1
Dibromofluoromethane	100		75 - 126		09/19/18 23:03	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		09/19/18 23:03	1
Toluene-d8 (Surr)	96		75 - 124		09/19/18 23:03	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450699/27

Matrix: Solid

Analysis Batch: 450699

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0322		mg/Kg		64	40 - 150
Benzene	0.0500	0.0501		mg/Kg		100	70 - 125
Bromodichloromethane	0.0500	0.0448		mg/Kg		90	67 - 129
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136
Bromomethane	0.0500	0.0398		mg/Kg		80	70 - 130
2-Butanone (MEK)	0.0500	0.0293		mg/Kg		59	47 - 138
Carbon disulfide	0.0500	0.0440		mg/Kg		88	70 - 129
Carbon tetrachloride	0.0500	0.0464		mg/Kg		93	75 - 125
Chlorobenzene	0.0500	0.0433		mg/Kg		87	50 - 150
Chloroethane	0.0500	0.0301	*	mg/Kg		60	75 - 125
Chloroform	0.0500	0.0454		mg/Kg		91	57 - 135
Chloromethane	0.0500	0.0346	*	mg/Kg		69	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0462		mg/Kg		92	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0381		mg/Kg		76	70 - 125
Dibromochloromethane	0.0500	0.0400		mg/Kg		80	69 - 125
1,1-Dichloroethane	0.0500	0.0439		mg/Kg		88	70 - 125
1,2-Dichloroethane	0.0500	0.0420		mg/Kg		84	70 - 130
1,1-Dichloroethene	0.0500	0.0455		mg/Kg		91	70 - 120
1,2-Dichloropropane	0.0500	0.0447		mg/Kg		89	70 - 125
Ethylbenzene	0.0500	0.0428		mg/Kg		86	61 - 136
2-Hexanone	0.0500	0.0292		mg/Kg		58	48 - 146
Methylene Chloride	0.0500	0.0436		mg/Kg		87	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0303		mg/Kg		61	50 - 148
Methyl tert-butyl ether	0.0500	0.0421		mg/Kg		84	50 - 140
Styrene	0.0500	0.0402		mg/Kg		80	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0364		mg/Kg		73	70 - 122
Tetrachloroethene	0.0500	0.0459		mg/Kg		92	70 - 124
Toluene	0.0500	0.0442		mg/Kg		88	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0463		mg/Kg		93	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0383		mg/Kg		77	70 - 125
1,1,1-Trichloroethane	0.0500	0.0456		mg/Kg		91	70 - 128
1,1,2-Trichloroethane	0.0500	0.0382		mg/Kg		76	70 - 125
Trichloroethene	0.0500	0.0512		mg/Kg		102	70 - 125
Vinyl acetate	0.0500	0.0228		mg/Kg		46	40 - 153
Vinyl chloride	0.0500	0.0365		mg/Kg		73	70 - 125
Xylenes, Total	0.100	0.0814		mg/Kg		81	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	103		75 - 126
1,2-Dichloroethane-d4 (Surr)	87		70 - 134
Toluene-d8 (Surr)	97		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-450699/28

Matrix: Solid

Analysis Batch: 450699

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0279		mg/Kg		56	40 - 150	14	30
Benzene	0.0500	0.0461		mg/Kg		92	70 - 125	8	30
Bromodichloromethane	0.0500	0.0420		mg/Kg		84	67 - 129	7	30
Bromoform	0.0500	0.0342		mg/Kg		68	68 - 136	6	30
Bromomethane	0.0500	0.0412		mg/Kg		82	70 - 130	3	30
2-Butanone (MEK)	0.0500	0.0267		mg/Kg		53	47 - 138	9	30
Carbon disulfide	0.0500	0.0414		mg/Kg		83	70 - 129	6	30
Carbon tetrachloride	0.0500	0.0446		mg/Kg		89	75 - 125	4	30
Chlorobenzene	0.0500	0.0404		mg/Kg		81	50 - 150	7	30
Chloroethane	0.0500	0.0336	*	mg/Kg		67	75 - 125	11	30
Chloroform	0.0500	0.0421		mg/Kg		84	57 - 135	8	30
Chloromethane	0.0500	0.0361		mg/Kg		72	70 - 125	4	30
cis-1,2-Dichloroethene	0.0500	0.0437		mg/Kg		87	70 - 125	5	30
cis-1,3-Dichloropropene	0.0500	0.0356		mg/Kg		71	70 - 125	7	30
Dibromochloromethane	0.0500	0.0372		mg/Kg		74	69 - 125	7	30
1,1-Dichloroethane	0.0500	0.0413		mg/Kg		83	70 - 125	6	30
1,2-Dichloroethane	0.0500	0.0392		mg/Kg		78	70 - 130	7	30
1,1-Dichloroethene	0.0500	0.0429		mg/Kg		86	70 - 120	6	30
1,2-Dichloropropane	0.0500	0.0428		mg/Kg		86	70 - 125	4	30
Ethylbenzene	0.0500	0.0402		mg/Kg		80	61 - 136	6	30
2-Hexanone	0.0500	0.0236	*	mg/Kg		47	48 - 146	21	30
Methylene Chloride	0.0500	0.0411		mg/Kg		82	70 - 126	6	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0251		mg/Kg		50	50 - 148	19	30
Methyl tert-butyl ether	0.0500	0.0383		mg/Kg		77	50 - 140	9	30
Styrene	0.0500	0.0375		mg/Kg		75	70 - 125	7	30
1,1,2,2-Tetrachloroethane	0.0500	0.0338	*	mg/Kg		68	70 - 122	7	30
Tetrachloroethene	0.0500	0.0420		mg/Kg		84	70 - 124	9	30
Toluene	0.0500	0.0407		mg/Kg		81	70 - 125	8	30
trans-1,2-Dichloroethene	0.0500	0.0439		mg/Kg		88	70 - 125	5	30
trans-1,3-Dichloropropene	0.0500	0.0356		mg/Kg		71	70 - 125	7	30
1,1,1-Trichloroethane	0.0500	0.0434		mg/Kg		87	70 - 128	5	30
1,1,2-Trichloroethane	0.0500	0.0353		mg/Kg		71	70 - 125	8	30
Trichloroethene	0.0500	0.0479		mg/Kg		96	70 - 125	7	30
Vinyl acetate	0.0500	0.0226		mg/Kg		45	40 - 153	1	30
Vinyl chloride	0.0500	0.0380		mg/Kg		76	70 - 125	4	30
Xylenes, Total	0.100	0.0762		mg/Kg		76	53 - 147	7	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	101		75 - 126
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
Toluene-d8 (Surr)	97		75 - 124

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450856/6

Matrix: Solid

Analysis Batch: 450856

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			09/20/18 13:15	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			09/20/18 13:15	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			09/20/18 13:15	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			09/20/18 13:15	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			09/20/18 13:15	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			09/20/18 13:15	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			09/20/18 13:15	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			09/20/18 13:15	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			09/20/18 13:15	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			09/20/18 13:15	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			09/20/18 13:15	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			09/20/18 13:15	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			09/20/18 13:15	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			09/20/18 13:15	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			09/20/18 13:15	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			09/20/18 13:15	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			09/20/18 13:15	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			09/20/18 13:15	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			09/20/18 13:15	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			09/20/18 13:15	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			09/20/18 13:15	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			09/20/18 13:15	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			09/20/18 13:15	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			09/20/18 13:15	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			09/20/18 13:15	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			09/20/18 13:15	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			09/20/18 13:15	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/20/18 13:15	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			09/20/18 13:15	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			09/20/18 13:15	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			09/20/18 13:15	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			09/20/18 13:15	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			09/20/18 13:15	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			09/20/18 13:15	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			09/20/18 13:15	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			09/20/18 13:15	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			09/20/18 13:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		75 - 131		09/20/18 13:15	1
Dibromofluoromethane	111		75 - 126		09/20/18 13:15	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 134		09/20/18 13:15	1
Toluene-d8 (Surr)	97		75 - 124		09/20/18 13:15	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450856/4

Matrix: Solid

Analysis Batch: 450856

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0589		mg/Kg		118	40 - 150
Benzene	0.0500	0.0499		mg/Kg		100	70 - 125
Bromodichloromethane	0.0500	0.0496		mg/Kg		99	67 - 129
Bromoform	0.0500	0.0525		mg/Kg		105	68 - 136
Bromomethane	0.0500	0.0441		mg/Kg		88	70 - 130
2-Butanone (MEK)	0.0500	0.0610		mg/Kg		122	47 - 138
Carbon disulfide	0.0500	0.0524		mg/Kg		105	70 - 129
Carbon tetrachloride	0.0500	0.0551		mg/Kg		110	75 - 125
Chlorobenzene	0.0500	0.0494		mg/Kg		99	50 - 150
Chloroethane	0.0500	0.0490		mg/Kg		98	75 - 125
Chloroform	0.0500	0.0514		mg/Kg		103	57 - 135
Chloromethane	0.0500	0.0531		mg/Kg		106	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0507		mg/Kg		101	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0463		mg/Kg		93	70 - 125
Dibromochloromethane	0.0500	0.0536		mg/Kg		107	69 - 125
1,1-Dichloroethane	0.0500	0.0491		mg/Kg		98	70 - 125
1,2-Dichloroethane	0.0500	0.0490		mg/Kg		98	70 - 130
1,1-Dichloroethene	0.0500	0.0542		mg/Kg		108	70 - 120
1,2-Dichloropropane	0.0500	0.0497		mg/Kg		99	70 - 125
Ethylbenzene	0.0500	0.0468		mg/Kg		94	61 - 136
2-Hexanone	0.0500	0.0518		mg/Kg		104	48 - 146
Methylene Chloride	0.0500	0.0524		mg/Kg		105	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0516		mg/Kg		103	50 - 148
Methyl tert-butyl ether	0.0500	0.0463		mg/Kg		93	50 - 140
Styrene	0.0500	0.0471		mg/Kg		94	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0426		mg/Kg		85	70 - 122
Tetrachloroethene	0.0500	0.0554		mg/Kg		111	70 - 124
Toluene	0.0500	0.0473		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0509		mg/Kg		102	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0448		mg/Kg		90	70 - 125
1,1,1-Trichloroethane	0.0500	0.0516		mg/Kg		103	70 - 128
1,1,2-Trichloroethane	0.0500	0.0498		mg/Kg		100	70 - 125
Trichloroethene	0.0500	0.0583		mg/Kg		117	70 - 125
Vinyl acetate	0.0500	0.0618		mg/Kg		124	40 - 153
Vinyl chloride	0.0500	0.0451		mg/Kg		90	70 - 125
Xylenes, Total	0.100	0.0890		mg/Kg		89	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		75 - 131
Dibromofluoromethane	111		75 - 126
1,2-Dichloroethane-d4 (Surr)	93		70 - 134
Toluene-d8 (Surr)	100		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-450856/5

Matrix: Solid

Analysis Batch: 450856

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0500	0.0554		mg/Kg		111	40 - 150	6	30
Benzene	0.0500	0.0502		mg/Kg		100	70 - 125	1	30
Bromodichloromethane	0.0500	0.0495		mg/Kg		99	67 - 129	0	30
Bromoform	0.0500	0.0498		mg/Kg		100	68 - 136	5	30
Bromomethane	0.0500	0.0440		mg/Kg		88	70 - 130	0	30
2-Butanone (MEK)	0.0500	0.0605		mg/Kg		121	47 - 138	1	30
Carbon disulfide	0.0500	0.0537		mg/Kg		107	70 - 129	3	30
Carbon tetrachloride	0.0500	0.0553		mg/Kg		111	75 - 125	0	30
Chlorobenzene	0.0500	0.0494		mg/Kg		99	50 - 150	0	30
Chloroethane	0.0500	0.0483		mg/Kg		97	75 - 125	2	30
Chloroform	0.0500	0.0514		mg/Kg		103	57 - 135	0	30
Chloromethane	0.0500	0.0524		mg/Kg		105	70 - 125	1	30
cis-1,2-Dichloroethene	0.0500	0.0508		mg/Kg		102	70 - 125	0	30
cis-1,3-Dichloropropene	0.0500	0.0452		mg/Kg		90	70 - 125	2	30
Dibromochloromethane	0.0500	0.0520		mg/Kg		104	69 - 125	3	30
1,1-Dichloroethane	0.0500	0.0497		mg/Kg		99	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0481		mg/Kg		96	70 - 130	2	30
1,1-Dichloroethene	0.0500	0.0531		mg/Kg		106	70 - 120	2	30
1,2-Dichloropropane	0.0500	0.0506		mg/Kg		101	70 - 125	2	30
Ethylbenzene	0.0500	0.0449		mg/Kg		90	61 - 136	4	30
2-Hexanone	0.0500	0.0502		mg/Kg		100	48 - 146	3	30
Methylene Chloride	0.0500	0.0526		mg/Kg		105	70 - 126	0	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0482		mg/Kg		96	50 - 148	7	30
Methyl tert-butyl ether	0.0500	0.0446		mg/Kg		89	50 - 140	4	30
Styrene	0.0500	0.0457		mg/Kg		91	70 - 125	3	30
1,1,1,2-Tetrachloroethane	0.0500	0.0422		mg/Kg		84	70 - 122	1	30
Tetrachloroethene	0.0500	0.0553		mg/Kg		111	70 - 124	0	30
Toluene	0.0500	0.0468		mg/Kg		94	70 - 125	1	30
trans-1,2-Dichloroethene	0.0500	0.0508		mg/Kg		102	70 - 125	0	30
trans-1,3-Dichloropropene	0.0500	0.0438		mg/Kg		88	70 - 125	2	30
1,1,1-Trichloroethane	0.0500	0.0519		mg/Kg		104	70 - 128	1	30
1,1,2-Trichloroethane	0.0500	0.0471		mg/Kg		94	70 - 125	6	30
Trichloroethene	0.0500	0.0598		mg/Kg		120	70 - 125	2	30
Vinyl acetate	0.0500	0.0546		mg/Kg		109	40 - 153	12	30
Vinyl chloride	0.0500	0.0446		mg/Kg		89	70 - 125	1	30
Xylenes, Total	0.100	0.0883		mg/Kg		88	53 - 147	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	89		75 - 131
Dibromofluoromethane	112		75 - 126
1,2-Dichloroethane-d4 (Surr)	93		70 - 134
Toluene-d8 (Surr)	99		75 - 124

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-450775/1-A

Matrix: Solid

Analysis Batch: 451099

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450775

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Isophorone	<0.17		0.17	0.037	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Carbazole	<0.17		0.17	0.083	mg/Kg		09/19/18 17:40	09/21/18 16:13	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450775/1-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450775

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		09/19/18 17:40	09/21/18 16:13	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		09/19/18 17:40	09/21/18 16:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	130		46 - 133	09/19/18 17:40	09/21/18 16:13	1
Phenol-d5	114		46 - 125	09/19/18 17:40	09/21/18 16:13	1
Nitrobenzene-d5	89		41 - 120	09/19/18 17:40	09/21/18 16:13	1
2-Fluorobiphenyl	90		44 - 121	09/19/18 17:40	09/21/18 16:13	1
2,4,6-Tribromophenol	85		25 - 139	09/19/18 17:40	09/21/18 16:13	1
Terphenyl-d14	87		35 - 160	09/19/18 17:40	09/21/18 16:13	1

Lab Sample ID: LCS 500-450775/2-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.21		mg/Kg		91	56 - 122
Bis(2-chloroethyl)ether	1.33	1.11		mg/Kg		83	55 - 111
1,3-Dichlorobenzene	1.33	1.05		mg/Kg		79	60 - 110
1,4-Dichlorobenzene	1.33	1.07		mg/Kg		80	61 - 110
1,2-Dichlorobenzene	1.33	1.10		mg/Kg		83	62 - 110
2-Methylphenol	1.33	1.17		mg/Kg		88	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.902		mg/Kg		68	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.06		mg/Kg		80	56 - 118
Hexachloroethane	1.33	1.03		mg/Kg		77	60 - 114
2-Chlorophenol	1.33	1.14		mg/Kg		85	64 - 110
Nitrobenzene	1.33	1.21		mg/Kg		91	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.14		mg/Kg		85	60 - 112
1,2,4-Trichlorobenzene	1.33	1.26		mg/Kg		94	62 - 110
Isophorone	1.33	1.10		mg/Kg		82	55 - 110
2,4-Dimethylphenol	1.33	1.20		mg/Kg		90	60 - 110
Hexachlorobutadiene	1.33	1.26		mg/Kg		95	56 - 120
Naphthalene	1.33	1.15		mg/Kg		86	63 - 110
2,4-Dichlorophenol	1.33	1.31		mg/Kg		98	58 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450775/2-A

Matrix: Solid

Analysis Batch: 451099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
4-Chloroaniline	1.33	1.09		mg/Kg		82	30 - 150
2,4,6-Trichlorophenol	1.33	1.27		mg/Kg		95	57 - 120
2,4,5-Trichlorophenol	1.33	1.28		mg/Kg		96	50 - 120
Hexachlorocyclopentadiene	1.33	1.16		mg/Kg		87	10 - 133
2-Methylnaphthalene	1.33	1.08		mg/Kg		81	62 - 110
2-Nitroaniline	1.33	1.18		mg/Kg		89	57 - 124
2-Chloronaphthalene	1.33	1.22		mg/Kg		91	64 - 110
4-Chloro-3-methylphenol	1.33	1.24		mg/Kg		93	65 - 122
2,6-Dinitrotoluene	1.33	1.29		mg/Kg		97	67 - 120
2-Nitrophenol	1.33	1.19		mg/Kg		89	60 - 120
3-Nitroaniline	1.33	0.922		mg/Kg		69	40 - 122
Dimethyl phthalate	1.33	1.21		mg/Kg		91	64 - 110
2,4-Dinitrophenol	2.67	0.996		mg/Kg		37	10 - 100
Acenaphthylene	1.33	1.16		mg/Kg		87	60 - 110
2,4-Dinitrotoluene	1.33	1.26		mg/Kg		95	62 - 117
Acenaphthene	1.33	1.12		mg/Kg		84	62 - 119
Dibenzofuran	1.33	1.17		mg/Kg		88	64 - 110
4-Nitrophenol	2.67	2.29		mg/Kg		86	30 - 122
Fluorene	1.33	1.10		mg/Kg		83	62 - 120
4-Nitroaniline	1.33	1.11		mg/Kg		83	60 - 160
4-Bromophenyl phenyl ether	1.33	1.22		mg/Kg		92	63 - 110
Hexachlorobenzene	1.33	1.11		mg/Kg		83	55 - 117
Diethyl phthalate	1.33	1.10		mg/Kg		83	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.24		mg/Kg		93	63 - 110
Pentachlorophenol	2.67	1.97		mg/Kg		74	13 - 112
N-Nitrosodiphenylamine	1.33	1.15		mg/Kg		87	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.55		mg/Kg		58	10 - 110
Phenanthrene	1.33	1.13		mg/Kg		85	62 - 120
Anthracene	1.33	1.16		mg/Kg		87	63 - 110
Carbazole	1.33	1.33		mg/Kg		100	59 - 158
Di-n-butyl phthalate	1.33	1.15		mg/Kg		87	65 - 120
Fluoranthene	1.33	1.15		mg/Kg		86	62 - 120
Pyrene	1.33	1.25		mg/Kg		94	61 - 128
Butyl benzyl phthalate	1.33	1.28		mg/Kg		96	61 - 116
Benzo[a]anthracene	1.33	1.21		mg/Kg		91	67 - 122
Chrysene	1.33	1.24		mg/Kg		93	63 - 120
3,3'-Dichlorobenzidine	1.33	1.13		mg/Kg		85	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.29		mg/Kg		97	63 - 118
Di-n-octyl phthalate	1.33	1.22		mg/Kg		92	63 - 119
Benzo[b]fluoranthene	1.33	1.35		mg/Kg		101	64 - 127
Benzo[k]fluoranthene	1.33	1.33		mg/Kg		100	65 - 120
Benzo[a]pyrene	1.33	1.42		mg/Kg		106	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.46		mg/Kg		109	57 - 127
Dibenz(a,h)anthracene	1.33	1.48		mg/Kg		111	64 - 119
Benzo[g,h,i]perylene	1.33	1.48		mg/Kg		111	65 - 132
3 & 4 Methylphenol	1.33	1.16		mg/Kg		87	57 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450775/2-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450775

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	128		46 - 133
Phenol-d5	109		46 - 125
Nitrobenzene-d5	99		41 - 120
2-Fluorobiphenyl	93		44 - 121
2,4,6-Tribromophenol	99		25 - 139
Terphenyl-d14	92		35 - 160

Lab Sample ID: 500-151344-19 MS
Matrix: Solid
Analysis Batch: 451317

Client Sample ID: 2615V-118-B12 (15-23)
Prep Type: Total/NA
Prep Batch: 450775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20		1.62	1.58		mg/Kg	☼	98	56 - 122
Bis(2-chloroethyl)ether	<0.20		1.62	1.13		mg/Kg	☼	70	55 - 111
1,3-Dichlorobenzene	<0.20	F1	1.62	0.824	F1	mg/Kg	☼	51	60 - 110
1,4-Dichlorobenzene	<0.20	F1	1.62	0.850	F1	mg/Kg	☼	53	61 - 110
1,2-Dichlorobenzene	<0.20	F1	1.62	0.904	F1	mg/Kg	☼	56	62 - 110
2-Methylphenol	<0.20		1.62	1.31		mg/Kg	☼	81	60 - 120
2,2'-oxybis[1-chloropropane]	<0.20		1.62	1.06		mg/Kg	☼	65	40 - 124
N-Nitrosodi-n-propylamine	<0.080		1.62	1.28		mg/Kg	☼	79	56 - 118
Hexachloroethane	<0.20	F1	1.62	0.328	F1	mg/Kg	☼	20	60 - 114
2-Chlorophenol	<0.20		1.62	1.35		mg/Kg	☼	84	64 - 110
Nitrobenzene	<0.040		1.62	1.14		mg/Kg	☼	71	60 - 116
Bis(2-chloroethoxy)methane	<0.20		1.62	1.33		mg/Kg	☼	82	60 - 112
1,2,4-Trichlorobenzene	<0.20		1.62	1.06		mg/Kg	☼	66	62 - 110
Isophorone	<0.20		1.62	1.24		mg/Kg	☼	77	55 - 110
2,4-Dimethylphenol	<0.40		1.62	1.45		mg/Kg	☼	90	60 - 110
Hexachlorobutadiene	<0.20		1.62	0.931		mg/Kg	☼	58	56 - 120
Naphthalene	<0.040		1.62	1.15		mg/Kg	☼	71	63 - 110
2,4-Dichlorophenol	<0.40		1.62	1.56		mg/Kg	☼	96	58 - 120
4-Chloroaniline	<0.80		1.62	0.939		mg/Kg	☼	58	30 - 150
2,4,6-Trichlorophenol	<0.40		1.62	1.24		mg/Kg	☼	77	57 - 120
2,4,5-Trichlorophenol	<0.40		1.62	1.37		mg/Kg	☼	84	50 - 120
Hexachlorocyclopentadiene	<0.80	F1	1.62	<0.81	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.034	J	1.62	1.31		mg/Kg	☼	79	62 - 110
2-Nitroaniline	<0.20		1.62	1.63		mg/Kg	☼	101	57 - 124
2-Chloronaphthalene	<0.20		1.62	1.32		mg/Kg	☼	82	64 - 110
4-Chloro-3-methylphenol	<0.40		1.62	1.56		mg/Kg	☼	97	65 - 122
2,6-Dinitrotoluene	<0.20		1.62	1.56		mg/Kg	☼	96	67 - 120
2-Nitrophenol	<0.40		1.62	1.29		mg/Kg	☼	80	60 - 120
3-Nitroaniline	<0.40		1.62	1.71		mg/Kg	☼	106	40 - 122
Dimethyl phthalate	<0.20		1.62	1.53		mg/Kg	☼	94	64 - 110
2,4-Dinitrophenol	<0.80	F1	3.23	<0.81	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.040		1.62	1.44		mg/Kg	☼	89	60 - 110
2,4-Dinitrotoluene	<0.20		1.62	1.38		mg/Kg	☼	85	62 - 117
Acenaphthene	0.011	J	1.62	1.55		mg/Kg	☼	95	62 - 119
Dibenzofuran	<0.20		1.62	1.55		mg/Kg	☼	96	64 - 110
4-Nitrophenol	<0.80	F1	3.23	<0.81	F1	mg/Kg	☼	0	30 - 122

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-151344-19 MS

Matrix: Solid

Analysis Batch: 451317

Client Sample ID: 2615V-118-B12 (15-23)

Prep Type: Total/NA

Prep Batch: 450775

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Fluorene	0.0082	J	1.62	1.64		mg/Kg	☼	101		62 - 120
4-Nitroaniline	<0.40		1.62	1.60		mg/Kg	☼	99		60 - 160
4-Bromophenyl phenyl ether	<0.20		1.62	1.65		mg/Kg	☼	102		63 - 110
Hexachlorobenzene	<0.080		1.62	1.70		mg/Kg	☼	105		55 - 117
Diethyl phthalate	<0.20		1.62	1.58		mg/Kg	☼	98		58 - 120
4-Chlorophenyl phenyl ether	<0.20		1.62	1.57		mg/Kg	☼	97		63 - 110
Pentachlorophenol	<0.80		3.23	1.17		mg/Kg	☼	36		13 - 112
N-Nitrosodiphenylamine	<0.20	F1	1.62	1.85	F1	mg/Kg	☼	114		65 - 112
4,6-Dinitro-2-methylphenol	<0.80	F1	3.23	<0.81	F1	mg/Kg	☼	0		10 - 110
Phenanthrene	0.10		1.62	1.89		mg/Kg	☼	111		62 - 120
Anthracene	<0.040		1.62	1.73		mg/Kg	☼	107		63 - 110
Carbazole	<0.20		1.62	1.78		mg/Kg	☼	110		59 - 158
Di-n-butyl phthalate	<0.20		1.62	1.60		mg/Kg	☼	99		65 - 120
Fluoranthene	<0.040		1.62	1.77		mg/Kg	☼	110		62 - 120
Pyrene	0.023	J	1.62	2.00		mg/Kg	☼	122		61 - 128
Butyl benzyl phthalate	<0.20	F1	1.62	1.99	F1	mg/Kg	☼	123		61 - 116
Benzo[a]anthracene	<0.040		1.62	1.75		mg/Kg	☼	108		67 - 122
Chrysene	0.025	J	1.62	1.74		mg/Kg	☼	106		63 - 120
3,3'-Dichlorobenzidine	<0.20		1.62	1.27		mg/Kg	☼	78		35 - 128
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.62	2.07	F1	mg/Kg	☼	128		63 - 118
Di-n-octyl phthalate	<0.20		1.62	1.74		mg/Kg	☼	107		63 - 119
Benzo[b]fluoranthene	<0.040	F1	1.62	2.32	F1	mg/Kg	☼	143		64 - 127
Benzo[k]fluoranthene	<0.040	F1	1.62	2.43	F1	mg/Kg	☼	151		65 - 120
Benzo[a]pyrene	<0.040		1.62	1.93		mg/Kg	☼	119		61 - 120
Indeno[1,2,3-cd]pyrene	<0.040		1.62	0.998		mg/Kg	☼	62		57 - 127
Dibenz(a,h)anthracene	<0.040		1.62	1.06		mg/Kg	☼	65		64 - 119
Benzo[g,h,i]perylene	<0.040	F1	1.62	0.805	F1	mg/Kg	☼	50		65 - 132
3 & 4 Methylphenol	<0.20		1.62	1.42		mg/Kg	☼	88		57 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	96		46 - 133
Phenol-d5	99		46 - 125
Nitrobenzene-d5	69		41 - 120
2-Fluorobiphenyl	82		44 - 121
2,4,6-Tribromophenol	77		25 - 139
Terphenyl-d14	115		35 - 160

Lab Sample ID: 500-151344-19 MSD

Matrix: Solid

Analysis Batch: 451400

Client Sample ID: 2615V-118-B12 (15-23)

Prep Type: Total/NA

Prep Batch: 450775

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Phenol	<0.20		1.60	1.72		mg/Kg	☼	107		56 - 122	8	30
Bis(2-chloroethyl)ether	<0.20		1.60	1.45		mg/Kg	☼	91		55 - 111	25	30
1,3-Dichlorobenzene	<0.20	F1	1.60	1.29	F2	mg/Kg	☼	81		60 - 110	44	30
1,4-Dichlorobenzene	<0.20	F1	1.60	1.31	F2	mg/Kg	☼	82		61 - 110	43	30
1,2-Dichlorobenzene	<0.20	F1	1.60	1.32	F2	mg/Kg	☼	82		62 - 110	37	30
2-Methylphenol	<0.20		1.60	1.54		mg/Kg	☼	96		60 - 120	16	30

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-151344-19 MSD

Matrix: Solid

Analysis Batch: 451400

Client Sample ID: 2615V-118-B12 (15-23)

Prep Type: Total/NA

Prep Batch: 450775

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.20		1.60	1.21		mg/Kg	☼	75	40 - 124	13	30
N-Nitrosodi-n-propylamine	<0.080		1.60	1.45		mg/Kg	☼	91	56 - 118	13	30
Hexachloroethane	<0.20	F1	1.60	0.490	F1 F2	mg/Kg	☼	31	60 - 114	39	30
2-Chlorophenol	<0.20		1.60	1.44		mg/Kg	☼	90	64 - 110	6	30
Nitrobenzene	<0.040		1.60	1.44		mg/Kg	☼	90	60 - 116	23	30
Bis(2-chloroethoxy)methane	<0.20		1.60	1.52		mg/Kg	☼	95	60 - 112	13	30
1,2,4-Trichlorobenzene	<0.20		1.60	1.54	F2	mg/Kg	☼	97	62 - 110	37	30
Isophorone	<0.20		1.60	1.48		mg/Kg	☼	92	55 - 110	17	30
2,4-Dimethylphenol	<0.40		1.60	1.69		mg/Kg	☼	105	60 - 110	15	30
Hexachlorobutadiene	<0.20		1.60	1.46	F2	mg/Kg	☼	91	56 - 120	44	30
Naphthalene	<0.040		1.60	1.58	F2	mg/Kg	☼	99	63 - 110	31	30
2,4-Dichlorophenol	<0.40		1.60	1.91		mg/Kg	☼	119	58 - 120	20	30
4-Chloroaniline	<0.80		1.60	1.20		mg/Kg	☼	75	30 - 150	25	30
2,4,6-Trichlorophenol	<0.40		1.60	1.33		mg/Kg	☼	83	57 - 120	7	30
2,4,5-Trichlorophenol	<0.40		1.60	1.44		mg/Kg	☼	90	50 - 120	5	30
Hexachlorocyclopentadiene	<0.80	F1	1.60	<0.80	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.034	J	1.60	1.81	F1 F2	mg/Kg	☼	111	62 - 110	32	30
2-Nitroaniline	<0.20		1.60	1.58		mg/Kg	☼	99	57 - 124	3	30
2-Chloronaphthalene	<0.20		1.60	1.57		mg/Kg	☼	98	64 - 110	17	30
4-Chloro-3-methylphenol	<0.40		1.60	1.75		mg/Kg	☼	109	65 - 122	11	30
2,6-Dinitrotoluene	<0.20		1.60	1.27		mg/Kg	☼	79	67 - 120	21	30
2-Nitrophenol	<0.40		1.60	1.08		mg/Kg	☼	68	60 - 120	17	30
3-Nitroaniline	<0.40		1.60	1.95		mg/Kg	☼	122	40 - 122	13	30
Dimethyl phthalate	<0.20		1.60	1.60		mg/Kg	☼	100	64 - 110	5	30
2,4-Dinitrophenol	<0.80	F1	3.20	<0.80	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.040		1.60	1.64		mg/Kg	☼	103	60 - 110	13	30
2,4-Dinitrotoluene	<0.20		1.60	1.02	F2	mg/Kg	☼	63	62 - 117	31	30
Acenaphthene	0.011	J	1.60	1.76		mg/Kg	☼	109	62 - 119	13	30
Dibenzofuran	<0.20		1.60	1.74		mg/Kg	☼	108	64 - 110	11	30
4-Nitrophenol	<0.80	F1	3.20	<0.80	F1	mg/Kg	☼	0	30 - 122	NC	30
Fluorene	0.0082	J	1.60	1.77		mg/Kg	☼	110	62 - 120	7	30
4-Nitroaniline	<0.40		1.60	1.46		mg/Kg	☼	91	60 - 160	9	30
4-Bromophenyl phenyl ether	<0.20		1.60	1.78	F1	mg/Kg	☼	111	63 - 110	7	30
Hexachlorobenzene	<0.080		1.60	1.83		mg/Kg	☼	114	55 - 117	7	30
Diethyl phthalate	<0.20		1.60	1.62		mg/Kg	☼	102	58 - 120	3	30
4-Chlorophenyl phenyl ether	<0.20		1.60	1.73		mg/Kg	☼	108	63 - 110	10	30
Pentachlorophenol	<0.80		3.20	1.31		mg/Kg	☼	41	13 - 112	11	30
N-Nitrosodiphenylamine	<0.20	F1	1.60	1.96	F1	mg/Kg	☼	123	65 - 112	6	30
4,6-Dinitro-2-methylphenol	<0.80	F1	3.20	<0.80	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.10		1.60	1.95		mg/Kg	☼	115	62 - 120	3	30
Anthracene	<0.040		1.60	1.81	F1	mg/Kg	☼	113	63 - 110	4	30
Carbazole	<0.20		1.60	1.82		mg/Kg	☼	114	59 - 158	2	30
Di-n-butyl phthalate	<0.20		1.60	1.70		mg/Kg	☼	106	65 - 120	6	30
Fluoranthene	<0.040		1.60	1.75		mg/Kg	☼	109	62 - 120	1	30
Pyrene	0.023	J	1.60	2.47	F1	mg/Kg	☼	153	61 - 128	21	30
Butyl benzyl phthalate	<0.20	F1	1.60	2.46	F1	mg/Kg	☼	154	61 - 116	21	30
Benzo[a]anthracene	<0.040		1.60	1.87		mg/Kg	☼	117	67 - 122	6	30
Chrysene	0.025	J	1.60	1.79		mg/Kg	☼	110	63 - 120	3	30

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-151344-19 MSD
Matrix: Solid
Analysis Batch: 451400

Client Sample ID: 2615V-118-B12 (15-23)
Prep Type: Total/NA
Prep Batch: 450775

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	<0.20		1.60	1.47		mg/Kg	☼	92	35 - 128	15	30
Bis(2-ethylhexyl) phthalate	<0.20	F1	1.60	2.58	F1	mg/Kg	☼	161	63 - 118	22	30
Di-n-octyl phthalate	<0.20		1.60	1.49		mg/Kg	☼	93	63 - 119	15	30
Benzo[b]fluoranthene	<0.040	F1	1.60	2.59	F1	mg/Kg	☼	162	64 - 127	11	30
Benzo[k]fluoranthene	<0.040	F1	1.60	2.54	F1	mg/Kg	☼	159	65 - 120	4	30
Benzo[a]pyrene	<0.040		1.60	2.03	F1	mg/Kg	☼	127	61 - 120	5	30
Indeno[1,2,3-cd]pyrene	<0.040		1.60	1.13		mg/Kg	☼	71	57 - 127	13	30
Dibenz(a,h)anthracene	<0.040		1.60	1.18		mg/Kg	☼	74	64 - 119	11	30
Benzo[g,h,i]perylene	<0.040	F1	1.60	0.949	F1	mg/Kg	☼	59	65 - 132	16	30
3 & 4 Methylphenol	<0.20		1.60	1.51		mg/Kg	☼	94	57 - 120	6	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	109		46 - 133
Phenol-d5	108		46 - 125
Nitrobenzene-d5	91		41 - 120
2-Fluorobiphenyl	99		44 - 121
2,4,6-Tribromophenol	93		25 - 139
Terphenyl-d14	153		35 - 160

Lab Sample ID: MB 500-450787/1-A
Matrix: Solid
Analysis Batch: 450849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450787

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Isophorone	<0.17		0.17	0.037	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		09/19/18 18:35	09/20/18 11:05	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450787/1-A
Matrix: Solid
Analysis Batch: 450849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450787

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Carbazole	<0.17		0.17	0.083	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		09/19/18 18:35	09/20/18 11:05	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		09/19/18 18:35	09/20/18 11:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	147	X	46 - 133	09/19/18 18:35	09/20/18 11:05	1
Phenol-d5	130	X	46 - 125	09/19/18 18:35	09/20/18 11:05	1
Nitrobenzene-d5	94		41 - 120	09/19/18 18:35	09/20/18 11:05	1
2-Fluorobiphenyl	94		44 - 121	09/19/18 18:35	09/20/18 11:05	1
2,4,6-Tribromophenol	83		25 - 139	09/19/18 18:35	09/20/18 11:05	1
Terphenyl-d14	89		35 - 160	09/19/18 18:35	09/20/18 11:05	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Lab Sample ID: LCS 500-450787/2-A
Matrix: Solid
Analysis Batch: 450849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450787
%Rec. Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.35		mg/Kg		101	56 - 122
Bis(2-chloroethyl)ether	1.33	1.26		mg/Kg		94	55 - 111
1,3-Dichlorobenzene	1.33	1.15		mg/Kg		86	60 - 110
1,4-Dichlorobenzene	1.33	1.19		mg/Kg		89	61 - 110
1,2-Dichlorobenzene	1.33	1.21		mg/Kg		91	62 - 110
2-Methylphenol	1.33	1.28		mg/Kg		96	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.12		mg/Kg		84	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.24		mg/Kg		93	56 - 118
Hexachloroethane	1.33	1.20		mg/Kg		90	60 - 114
2-Chlorophenol	1.33	1.26		mg/Kg		95	64 - 110
Nitrobenzene	1.33	1.26		mg/Kg		95	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.22		mg/Kg		91	60 - 112
1,2,4-Trichlorobenzene	1.33	1.27		mg/Kg		95	62 - 110
Isophorone	1.33	1.17		mg/Kg		88	55 - 110
2,4-Dimethylphenol	1.33	1.24		mg/Kg		93	60 - 110
Hexachlorobutadiene	1.33	1.29		mg/Kg		97	56 - 120
Naphthalene	1.33	1.20		mg/Kg		90	63 - 110
2,4-Dichlorophenol	1.33	1.34		mg/Kg		100	58 - 120
4-Chloroaniline	1.33	1.14		mg/Kg		85	30 - 150
2,4,6-Trichlorophenol	1.33	1.31		mg/Kg		98	57 - 120
2,4,5-Trichlorophenol	1.33	1.30		mg/Kg		97	50 - 120
Hexachlorocyclopentadiene	1.33	1.16		mg/Kg		87	10 - 133
2-Methylnaphthalene	1.33	1.13		mg/Kg		85	62 - 110
2-Nitroaniline	1.33	1.29		mg/Kg		96	57 - 124
2-Chloronaphthalene	1.33	1.28		mg/Kg		96	64 - 110
4-Chloro-3-methylphenol	1.33	1.30		mg/Kg		98	65 - 122
2,6-Dinitrotoluene	1.33	1.35		mg/Kg		101	67 - 120
2-Nitrophenol	1.33	1.21		mg/Kg		90	60 - 120
3-Nitroaniline	1.33	0.851		mg/Kg		64	40 - 122
Dimethyl phthalate	1.33	1.28		mg/Kg		96	64 - 110
2,4-Dinitrophenol	2.67	1.46		mg/Kg		55	10 - 100
Acenaphthylene	1.33	1.22		mg/Kg		92	60 - 110
2,4-Dinitrotoluene	1.33	1.34		mg/Kg		100	62 - 117
Acenaphthene	1.33	1.20		mg/Kg		90	62 - 119
Dibenzofuran	1.33	1.24		mg/Kg		93	64 - 110
4-Nitrophenol	2.67	2.56		mg/Kg		96	30 - 122
Fluorene	1.33	1.18		mg/Kg		88	62 - 120
4-Nitroaniline	1.33	1.19		mg/Kg		89	60 - 160
4-Bromophenyl phenyl ether	1.33	1.25		mg/Kg		93	63 - 110
Hexachlorobenzene	1.33	1.13		mg/Kg		85	55 - 117
Diethyl phthalate	1.33	1.18		mg/Kg		89	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.29		mg/Kg		97	63 - 110
Pentachlorophenol	2.67	2.38		mg/Kg		89	13 - 112
N-Nitrosodiphenylamine	1.33	1.24		mg/Kg		93	65 - 112
4,6-Dinitro-2-methylphenol	2.67	2.06		mg/Kg		77	10 - 110
Phenanthrene	1.33	1.21		mg/Kg		90	62 - 120
Anthracene	1.33	1.23		mg/Kg		92	63 - 110
Carbazole	1.33	1.42		mg/Kg		106	59 - 158
Di-n-butyl phthalate	1.33	1.25		mg/Kg		94	65 - 120
Fluoranthene	1.33	1.24		mg/Kg		93	62 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450787/2-A
Matrix: Solid
Analysis Batch: 450849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450787

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Pyrene	1.33	1.28		mg/Kg		96	61 - 128
Butyl benzyl phthalate	1.33	1.40		mg/Kg		105	61 - 116
Benzo[a]anthracene	1.33	1.26		mg/Kg		94	67 - 122
Chrysene	1.33	1.31		mg/Kg		98	63 - 120
3,3'-Dichlorobenzidine	1.33	1.07		mg/Kg		81	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.40		mg/Kg		105	63 - 118
Di-n-octyl phthalate	1.33	1.39		mg/Kg		104	63 - 119
Benzo[b]fluoranthene	1.33	1.39		mg/Kg		104	64 - 127
Benzo[k]fluoranthene	1.33	1.44		mg/Kg		108	65 - 120
Benzo[a]pyrene	1.33	1.48		mg/Kg		111	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.50		mg/Kg		112	57 - 127
Dibenz(a,h)anthracene	1.33	1.44		mg/Kg		108	64 - 119
Benzo[g,h,i]perylene	1.33	1.44		mg/Kg		108	65 - 132
3 & 4 Methylphenol	1.33	1.30		mg/Kg		97	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	136	X	46 - 133
Phenol-d5	119		46 - 125
Nitrobenzene-d5	104		41 - 120
2-Fluorobiphenyl	96		44 - 121
2,4,6-Tribromophenol	99		25 - 139
Terphenyl-d14	92		35 - 160

Lab Sample ID: MB 500-450846/1-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Isophorone	<0.17		0.17	0.037	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		09/20/18 07:45	09/21/18 15:44	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450846/1-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Carbazole	<0.17		0.17	0.083	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		09/20/18 07:45	09/21/18 15:44	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		09/20/18 07:45	09/21/18 15:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	131		46 - 133	09/20/18 07:45	09/21/18 15:44	1
Phenol-d5	113		46 - 125	09/20/18 07:45	09/21/18 15:44	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-450846/1-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450846

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5	86		41 - 120	09/20/18 07:45	09/21/18 15:44	1
2-Fluorobiphenyl	90		44 - 121	09/20/18 07:45	09/21/18 15:44	1
2,4,6-Tribromophenol	82		25 - 139	09/20/18 07:45	09/21/18 15:44	1
Terphenyl-d14	83		35 - 160	09/20/18 07:45	09/21/18 15:44	1

Lab Sample ID: LCS 500-450846/2-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.23		mg/Kg		93	56 - 122
Bis(2-chloroethyl)ether	1.33	1.10		mg/Kg		83	55 - 111
1,3-Dichlorobenzene	1.33	1.09		mg/Kg		82	60 - 110
1,4-Dichlorobenzene	1.33	1.09		mg/Kg		82	61 - 110
1,2-Dichlorobenzene	1.33	1.12		mg/Kg		84	62 - 110
2-Methylphenol	1.33	1.19		mg/Kg		89	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.979		mg/Kg		73	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.09		mg/Kg		82	56 - 118
Hexachloroethane	1.33	1.09		mg/Kg		82	60 - 114
2-Chlorophenol	1.33	1.15		mg/Kg		86	64 - 110
Nitrobenzene	1.33	1.20		mg/Kg		90	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.16		mg/Kg		87	60 - 112
1,2,4-Trichlorobenzene	1.33	1.21		mg/Kg		91	62 - 110
Isophorone	1.33	1.09		mg/Kg		82	55 - 110
2,4-Dimethylphenol	1.33	1.19		mg/Kg		89	60 - 110
Hexachlorobutadiene	1.33	1.24		mg/Kg		93	56 - 120
Naphthalene	1.33	1.13		mg/Kg		85	63 - 110
2,4-Dichlorophenol	1.33	1.26		mg/Kg		95	58 - 120
4-Chloroaniline	1.33	1.05		mg/Kg		79	30 - 150
2,4,6-Trichlorophenol	1.33	1.24		mg/Kg		93	57 - 120
2,4,5-Trichlorophenol	1.33	1.26		mg/Kg		94	50 - 120
Hexachlorocyclopentadiene	1.33	1.15		mg/Kg		86	10 - 133
2-Methylnaphthalene	1.33	1.09		mg/Kg		82	62 - 110
2-Nitroaniline	1.33	1.21		mg/Kg		91	57 - 124
2-Chloronaphthalene	1.33	1.22		mg/Kg		91	64 - 110
4-Chloro-3-methylphenol	1.33	1.21		mg/Kg		91	65 - 122
2,6-Dinitrotoluene	1.33	1.28		mg/Kg		96	67 - 120
2-Nitrophenol	1.33	1.19		mg/Kg		89	60 - 120
3-Nitroaniline	1.33	0.828		mg/Kg		62	40 - 122
Dimethyl phthalate	1.33	1.19		mg/Kg		89	64 - 110
2,4-Dinitrophenol	2.67	1.45		mg/Kg		54	10 - 100
Acenaphthylene	1.33	1.16		mg/Kg		87	60 - 110
2,4-Dinitrotoluene	1.33	1.26		mg/Kg		94	62 - 117
Acenaphthene	1.33	1.12		mg/Kg		84	62 - 119
Dibenzofuran	1.33	1.18		mg/Kg		88	64 - 110
4-Nitrophenol	2.67	2.38		mg/Kg		89	30 - 122
Fluorene	1.33	1.11		mg/Kg		83	62 - 120
4-Nitroaniline	1.33	1.09		mg/Kg		82	60 - 160

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-450846/2-A
Matrix: Solid
Analysis Batch: 451099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Bromophenyl phenyl ether	1.33	1.21		mg/Kg		91	63 - 110
Hexachlorobenzene	1.33	1.08		mg/Kg		81	55 - 117
Diethyl phthalate	1.33	1.09		mg/Kg		82	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.24		mg/Kg		93	63 - 110
Pentachlorophenol	2.67	2.15		mg/Kg		81	13 - 112
N-Nitrosodiphenylamine	1.33	1.16		mg/Kg		87	65 - 112
4,6-Dinitro-2-methylphenol	2.67	2.00		mg/Kg		75	10 - 110
Phenanthrene	1.33	1.12		mg/Kg		84	62 - 120
Anthracene	1.33	1.14		mg/Kg		85	63 - 110
Carbazole	1.33	1.31		mg/Kg		98	59 - 158
Di-n-butyl phthalate	1.33	1.14		mg/Kg		85	65 - 120
Fluoranthene	1.33	1.13		mg/Kg		85	62 - 120
Pyrene	1.33	1.21		mg/Kg		91	61 - 128
Butyl benzyl phthalate	1.33	1.28		mg/Kg		96	61 - 116
Benzo[a]anthracene	1.33	1.19		mg/Kg		89	67 - 122
Chrysene	1.33	1.21		mg/Kg		91	63 - 120
3,3'-Dichlorobenzidine	1.33	1.13		mg/Kg		85	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.28		mg/Kg		96	63 - 118
Di-n-octyl phthalate	1.33	1.24		mg/Kg		93	63 - 119
Benzo[b]fluoranthene	1.33	1.30		mg/Kg		98	64 - 127
Benzo[k]fluoranthene	1.33	1.32		mg/Kg		99	65 - 120
Benzo[a]pyrene	1.33	1.37		mg/Kg		103	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.43		mg/Kg		107	57 - 127
Dibenz(a,h)anthracene	1.33	1.43		mg/Kg		107	64 - 119
Benzo[g,h,i]perylene	1.33	1.43		mg/Kg		107	65 - 132
3 & 4 Methylphenol	1.33	1.17		mg/Kg		88	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	123		46 - 133
Phenol-d5	104		46 - 125
Nitrobenzene-d5	94		41 - 120
2-Fluorobiphenyl	88		44 - 121
2,4,6-Tribromophenol	94		25 - 139
Terphenyl-d14	86		35 - 160

Lab Sample ID: MB 500-451519/1-A
Matrix: Solid
Analysis Batch: 451567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 451519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		09/24/18 20:33	09/25/18 11:44	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-451519/1-A
Matrix: Solid
Analysis Batch: 451567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 451519

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Isophorone	<0.17		0.17	0.037	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Carbazole	<0.17		0.17	0.083	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		09/24/18 20:33	09/25/18 11:44	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-451519/1-A
Matrix: Solid
Analysis Batch: 451567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 451519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		09/24/18 20:33	09/25/18 11:44	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		09/24/18 20:33	09/25/18 11:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	116		46 - 133	09/24/18 20:33	09/25/18 11:44	1
Phenol-d5	108		46 - 125	09/24/18 20:33	09/25/18 11:44	1
Nitrobenzene-d5	86		41 - 120	09/24/18 20:33	09/25/18 11:44	1
2-Fluorobiphenyl	90		44 - 121	09/24/18 20:33	09/25/18 11:44	1
2,4,6-Tribromophenol	27		25 - 139	09/24/18 20:33	09/25/18 11:44	1
Terphenyl-d14	98		35 - 160	09/24/18 20:33	09/25/18 11:44	1

Lab Sample ID: LCS 500-451519/2-A
Matrix: Solid
Analysis Batch: 451567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 451519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.32		mg/Kg		99	56 - 122
Bis(2-chloroethyl)ether	1.33	1.22		mg/Kg		92	55 - 111
1,3-Dichlorobenzene	1.33	1.20		mg/Kg		90	60 - 110
1,4-Dichlorobenzene	1.33	1.24		mg/Kg		93	61 - 110
1,2-Dichlorobenzene	1.33	1.24		mg/Kg		93	62 - 110
2-Methylphenol	1.33	1.28		mg/Kg		96	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.08		mg/Kg		81	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.16		mg/Kg		87	56 - 118
Hexachloroethane	1.33	1.22		mg/Kg		92	60 - 114
2-Chlorophenol	1.33	1.31		mg/Kg		98	64 - 110
Nitrobenzene	1.33	1.20		mg/Kg		90	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.18		mg/Kg		88	60 - 112
1,2,4-Trichlorobenzene	1.33	1.25		mg/Kg		93	62 - 110
Isophorone	1.33	1.17		mg/Kg		88	55 - 110
2,4-Dimethylphenol	1.33	1.18		mg/Kg		89	60 - 110
Hexachlorobutadiene	1.33	1.14		mg/Kg		86	56 - 120
Naphthalene	1.33	1.19		mg/Kg		89	63 - 110
2,4-Dichlorophenol	1.33	1.27		mg/Kg		95	58 - 120
4-Chloroaniline	1.33	1.18		mg/Kg		89	30 - 150
2,4,6-Trichlorophenol	1.33	1.15		mg/Kg		86	57 - 120
2,4,5-Trichlorophenol	1.33	1.18		mg/Kg		88	50 - 120
Hexachlorocyclopentadiene	1.33	0.673		mg/Kg		50	10 - 133
2-Methylnaphthalene	1.33	1.15		mg/Kg		87	62 - 110
2-Nitroaniline	1.33	1.20		mg/Kg		90	57 - 124
2-Chloronaphthalene	1.33	1.23		mg/Kg		92	64 - 110
4-Chloro-3-methylphenol	1.33	1.23		mg/Kg		93	65 - 122

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-451519/2-A
Matrix: Solid
Analysis Batch: 451567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 451519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	1.33	1.25		mg/Kg		93	67 - 120
2-Nitrophenol	1.33	1.21		mg/Kg		91	60 - 120
3-Nitroaniline	1.33	0.884		mg/Kg		66	40 - 122
Dimethyl phthalate	1.33	1.19		mg/Kg		89	64 - 110
2,4-Dinitrophenol	2.67	0.705		mg/Kg		26	10 - 100
Acenaphthylene	1.33	1.26		mg/Kg		95	60 - 110
2,4-Dinitrotoluene	1.33	1.22		mg/Kg		92	62 - 117
Acenaphthene	1.33	1.26		mg/Kg		94	62 - 119
Dibenzofuran	1.33	1.14		mg/Kg		85	64 - 110
4-Nitrophenol	2.67	2.06		mg/Kg		77	30 - 122
Fluorene	1.33	1.15		mg/Kg		87	62 - 120
4-Nitroaniline	1.33	1.18		mg/Kg		89	60 - 160
4-Bromophenyl phenyl ether	1.33	1.23		mg/Kg		93	63 - 110
Hexachlorobenzene	1.33	1.17		mg/Kg		88	55 - 117
Diethyl phthalate	1.33	1.16		mg/Kg		87	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.13		mg/Kg		84	63 - 110
Pentachlorophenol	2.67	1.27		mg/Kg		48	13 - 112
N-Nitrosodiphenylamine	1.33	1.24		mg/Kg		93	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.35		mg/Kg		51	10 - 110
Phenanthrene	1.33	1.24		mg/Kg		93	62 - 120
Anthracene	1.33	1.27		mg/Kg		96	63 - 110
Carbazole	1.33	1.33		mg/Kg		100	59 - 158
Di-n-butyl phthalate	1.33	1.23		mg/Kg		92	65 - 120
Fluoranthene	1.33	1.20		mg/Kg		90	62 - 120
Pyrene	1.33	1.38		mg/Kg		104	61 - 128
Butyl benzyl phthalate	1.33	1.40		mg/Kg		105	61 - 116
Benzo[a]anthracene	1.33	1.38		mg/Kg		103	67 - 122
Chrysene	1.33	1.33		mg/Kg		99	63 - 120
3,3'-Dichlorobenzidine	1.33	1.10		mg/Kg		83	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.46		mg/Kg		110	63 - 118
Di-n-octyl phthalate	1.33	1.30		mg/Kg		98	63 - 119
Benzo[b]fluoranthene	1.33	1.24		mg/Kg		93	64 - 127
Benzo[k]fluoranthene	1.33	1.18		mg/Kg		88	65 - 120
Benzo[a]pyrene	1.33	1.16		mg/Kg		87	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.17		mg/Kg		88	57 - 127
Dibenz(a,h)anthracene	1.33	1.18		mg/Kg		88	64 - 119
Benzo[g,h,i]perylene	1.33	1.29		mg/Kg		97	65 - 132
3 & 4 Methylphenol	1.33	1.12		mg/Kg		84	57 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	124		46 - 133
Phenol-d5	120		46 - 125
Nitrobenzene-d5	92		41 - 120
2-Fluorobiphenyl	91		44 - 121
2,4,6-Tribromophenol	93		25 - 139
Terphenyl-d14	102		35 - 160

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-450335/1-A
Matrix: Solid
Analysis Batch: 450909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Arsenic	<1.0		1.0	0.34	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Barium	<1.0		1.0	0.11	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Beryllium	<0.40		0.40	0.093	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Boron	<5.0		5.0	0.47	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Cadmium	0.0634	J	0.20	0.036	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Calcium	6.57	J	20	3.4	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Chromium	<1.0		1.0	0.50	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Cobalt	<0.50		0.50	0.13	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Copper	0.656	J	1.0	0.28	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Iron	<20		20	10	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Lead	<0.50		0.50	0.23	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Magnesium	<10		10	5.0	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Manganese	<1.0		1.0	0.15	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Nickel	<1.0		1.0	0.29	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Potassium	<50		50	18	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Silver	<0.50		0.50	0.13	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Sodium	<100		100	15	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Thallium	<1.0		1.0	0.50	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Vanadium	<0.50		0.50	0.12	mg/Kg		09/18/18 08:03	09/20/18 04:15	1
Zinc	<2.0		2.0	0.88	mg/Kg		09/18/18 08:03	09/20/18 04:15	1

Lab Sample ID: MB 500-450335/1-A
Matrix: Solid
Analysis Batch: 451249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<1.0		1.0	0.59	mg/Kg		09/18/18 08:03	09/21/18 13:26	1

Lab Sample ID: LCS 500-450335/2-A
Matrix: Solid
Analysis Batch: 450909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	44.4		mg/Kg		89	80 - 120
Arsenic	10.0	8.57		mg/Kg		86	80 - 120
Barium	200	186		mg/Kg		93	80 - 120
Beryllium	5.00	4.60		mg/Kg		92	80 - 120
Boron	100	82.4		mg/Kg		82	80 - 120
Cadmium	5.00	4.52		mg/Kg		90	80 - 120
Calcium	1000	941		mg/Kg		94	80 - 120
Chromium	20.0	18.4		mg/Kg		92	80 - 120
Cobalt	50.0	46.8		mg/Kg		94	80 - 120
Copper	25.0	25.6		mg/Kg		102	80 - 120
Iron	100	109		mg/Kg		109	80 - 120
Lead	10.0	8.90		mg/Kg		89	80 - 120
Magnesium	1000	905		mg/Kg		91	80 - 120
Manganese	50.0	47.1		mg/Kg		94	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-450335/2-A
Matrix: Solid
Analysis Batch: 450909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Nickel	50.0	45.9		mg/Kg		92	80 - 120
Potassium	1000	914		mg/Kg		91	80 - 120
Silver	5.00	4.18		mg/Kg		84	80 - 120
Sodium	1000	956		mg/Kg		96	80 - 120
Thallium	10.0	8.33		mg/Kg		83	80 - 120
Vanadium	50.0	47.6		mg/Kg		95	80 - 120
Zinc	50.0	45.1		mg/Kg		90	80 - 120

Lab Sample ID: LCS 500-450335/2-A
Matrix: Solid
Analysis Batch: 451249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Selenium	10.0	8.63		mg/Kg		86	80 - 120

Lab Sample ID: 500-151344-1 MS
Matrix: Solid
Analysis Batch: 450909

Client Sample ID: 2615V-118-B09 (0-5)
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.25	J F1	27.5	5.26	F1	mg/Kg	☼	18	75 - 125
Arsenic	5.3		5.51	10.8		mg/Kg	☼	99	75 - 125
Barium	28		110	128		mg/Kg	☼	91	75 - 125
Beryllium	0.36		2.75	2.90		mg/Kg	☼	92	75 - 125
Boron	7.2		55.1	57.5		mg/Kg	☼	91	75 - 125
Cadmium	0.47	B F1	2.75	2.37	F1	mg/Kg	☼	69	75 - 125
Chromium	7.7	F1	11.0	22.6	F1	mg/Kg	☼	135	75 - 125
Cobalt	5.8		27.5	36.1		mg/Kg	☼	110	75 - 125
Copper	17	B F1 F2	13.8	32.5		mg/Kg	☼	115	75 - 125
Iron	10000		55.1	15500	4	mg/Kg	☼	9645	75 - 125
Lead	40		5.51	30.6	4	mg/Kg	☼	-166	75 - 125
Magnesium	16000		551	19500	4	mg/Kg	☼	623	75 - 125
Manganese	210		27.5	356	4	mg/Kg	☼	526	75 - 125
Nickel	12	F1	27.5	48.8	F1	mg/Kg	☼	132	75 - 125
Potassium	1000	F1	551	3840	F1	mg/Kg	☼	508	75 - 125
Silver	0.084	J	2.75	2.29		mg/Kg	☼	80	75 - 125
Sodium	600		551	1190		mg/Kg	☼	106	75 - 125
Thallium	<0.52		5.51	4.83		mg/Kg	☼	88	75 - 125
Vanadium	12		27.5	43.5		mg/Kg	☼	113	75 - 125
Zinc	94	F1	27.5	88.9	F1	mg/Kg	☼	-20	75 - 125

Lab Sample ID: 500-151344-1 MS
Matrix: Solid
Analysis Batch: 451249

Client Sample ID: 2615V-118-B09 (0-5)
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Selenium	0.38	J F1	5.51	4.28	F1	mg/Kg	☼	71	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-151344-1 MS

Matrix: Solid

Analysis Batch: 451249

Client Sample ID: 2615V-118-B09 (0-5)

Prep Type: Total/NA

Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	38000	B	551	46200	4	mg/Kg	☼	1478	75 - 125

Lab Sample ID: 500-151344-1 MSD

Matrix: Solid

Analysis Batch: 450909

Client Sample ID: 2615V-118-B09 (0-5)

Prep Type: Total/NA

Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.25	J F1	27.1	5.91	F1	mg/Kg	☼	21	75 - 125	12	20
Arsenic	5.3		5.41	10.2		mg/Kg	☼	91	75 - 125	5	20
Barium	28		108	127		mg/Kg	☼	91	75 - 125	1	20
Beryllium	0.36		2.71	2.85		mg/Kg	☼	92	75 - 125	2	20
Boron	7.2		54.1	56.4		mg/Kg	☼	91	75 - 125	2	20
Cadmium	0.47	B F1	2.71	2.38	F1	mg/Kg	☼	71	75 - 125	1	20
Chromium	7.7	F1	10.8	20.7		mg/Kg	☼	120	75 - 125	8	20
Cobalt	5.8		27.1	33.7		mg/Kg	☼	103	75 - 125	7	20
Copper	17	B F1 F2	13.5	42.0	F1 F2	mg/Kg	☼	188	75 - 125	26	20
Iron	10000		54.1	16100	4	mg/Kg	☼	11002	75 - 125	4	20
Lead	40		5.41	37.1	4	mg/Kg	☼	-48	75 - 125	19	20
Magnesium	16000		541	19100	4	mg/Kg	☼	566	75 - 125	2	20
Manganese	210		27.1	291	4	mg/Kg	☼	296	75 - 125	20	20
Nickel	12	F1	27.1	43.5		mg/Kg	☼	115	75 - 125	12	20
Potassium	1000	F1	541	3320	F1	mg/Kg	☼	422	75 - 125	14	20
Silver	0.084	J	2.71	2.30		mg/Kg	☼	82	75 - 125	0	20
Sodium	600		541	1180		mg/Kg	☼	107	75 - 125	1	20
Thallium	<0.52		5.41	4.76		mg/Kg	☼	88	75 - 125	1	20
Vanadium	12		27.1	41.6		mg/Kg	☼	108	75 - 125	5	20
Zinc	94	F1	27.1	79.9	F1	mg/Kg	☼	-53	75 - 125	11	20

Lab Sample ID: 500-151344-1 MSD

Matrix: Solid

Analysis Batch: 451249

Client Sample ID: 2615V-118-B09 (0-5)

Prep Type: Total/NA

Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Selenium	0.38	J F1	5.41	4.62		mg/Kg	☼	78	75 - 125	8	20

Lab Sample ID: 500-151344-1 MSD

Matrix: Solid

Analysis Batch: 451249

Client Sample ID: 2615V-118-B09 (0-5)

Prep Type: Total/NA

Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	38000	B	541	46800	4	mg/Kg	☼	1608	75 - 125	1	20

Lab Sample ID: 500-151344-1 DU

Matrix: Solid

Analysis Batch: 450909

Client Sample ID: 2615V-118-B09 (0-5)

Prep Type: Total/NA

Prep Batch: 450335

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	0.25	J F1	<1.1		mg/Kg	☼	NC	20
Arsenic	5.3		6.31		mg/Kg	☼	17	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-151344-1 DU
Matrix: Solid
Analysis Batch: 450909

Client Sample ID: 2615V-118-B09 (0-5)
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Barium	28		29.7		mg/Kg	☼	7	20
Beryllium	0.36		0.416		mg/Kg	☼	13	20
Boron	7.2		9.69	F5	mg/Kg	☼	30	20
Cadmium	0.47	B F1	0.205	F3	mg/Kg	☼	78	20
Chromium	7.7	F1	9.31		mg/Kg	☼	18	20
Cobalt	5.8		6.45		mg/Kg	☼	11	20
Copper	17	B F1 F2	19.9		mg/Kg	☼	18	20
Iron	10000		13900	F3	mg/Kg	☼	31	20
Lead	40		41.4		mg/Kg	☼	4	20
Magnesium	16000		17000		mg/Kg	☼	6	20
Manganese	210		229		mg/Kg	☼	8	20
Nickel	12	F1	15.2	F3	mg/Kg	☼	21	20
Potassium	1000	F1	1470	F3	mg/Kg	☼	34	20
Silver	0.084	J	0.156	J F5	mg/Kg	☼	60	20
Sodium	600		654		mg/Kg	☼	9	20
Thallium	<0.52		<0.53		mg/Kg	☼	NC	20
Vanadium	12		13.9		mg/Kg	☼	11	20
Zinc	94	F1	58.5	F3	mg/Kg	☼	47	20

Lab Sample ID: 500-151344-1 DU
Matrix: Solid
Analysis Batch: 451249

Client Sample ID: 2615V-118-B09 (0-5)
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Selenium	0.38	J F1	<0.53		mg/Kg	☼	NC	20

Lab Sample ID: 500-151344-1 DU
Matrix: Solid
Analysis Batch: 451249

Client Sample ID: 2615V-118-B09 (0-5)
Prep Type: Total/NA
Prep Batch: 450335

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Calcium	38000	B	44600		mg/Kg	☼	16	20

Lab Sample ID: MB 500-450347/1-A
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450347

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Arsenic	<1.0		1.0	0.34	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Barium	<1.0		1.0	0.11	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Beryllium	<0.40		0.40	0.093	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Boron	<5.0		5.0	0.47	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Cadmium	0.0609	J	0.20	0.036	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Calcium	7.07	J	20	3.4	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Chromium	<1.0		1.0	0.50	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Cobalt	<0.50		0.50	0.13	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Copper	0.316	J	1.0	0.28	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Iron	10.9	J	20	10	mg/Kg		09/18/18 08:19	09/18/18 19:11	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-450347/1-A
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450347

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.50		0.50	0.23	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Magnesium	<10		10	5.0	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Manganese	0.154	J	1.0	0.15	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Nickel	<1.0		1.0	0.29	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Potassium	<50		50	18	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Selenium	<1.0		1.0	0.59	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Silver	<0.50		0.50	0.13	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Sodium	<100		100	15	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Thallium	<1.0		1.0	0.50	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Vanadium	<0.50		0.50	0.12	mg/Kg		09/18/18 08:19	09/18/18 19:11	1
Zinc	<2.0		2.0	0.88	mg/Kg		09/18/18 08:19	09/18/18 19:11	1

Lab Sample ID: LCS 500-450347/2-A
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450347

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.3		mg/Kg		91	80 - 120
Arsenic	10.0	9.05		mg/Kg		91	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Beryllium	5.00	4.71		mg/Kg		94	80 - 120
Boron	100	87.9		mg/Kg		88	80 - 120
Cadmium	5.00	4.70		mg/Kg		94	80 - 120
Calcium	1000	963		mg/Kg		96	80 - 120
Chromium	20.0	18.7		mg/Kg		94	80 - 120
Cobalt	50.0	47.1		mg/Kg		94	80 - 120
Copper	25.0	26.1		mg/Kg		104	80 - 120
Iron	100	112		mg/Kg		112	80 - 120
Lead	10.0	8.74		mg/Kg		87	80 - 120
Magnesium	1000	939		mg/Kg		94	80 - 120
Manganese	50.0	48.0		mg/Kg		96	80 - 120
Nickel	50.0	46.9		mg/Kg		94	80 - 120
Potassium	1000	941		mg/Kg		94	80 - 120
Selenium	10.0	8.07		mg/Kg		81	80 - 120
Silver	5.00	4.27		mg/Kg		85	80 - 120
Sodium	1000	954		mg/Kg		95	80 - 120
Thallium	10.0	8.86		mg/Kg		89	80 - 120
Vanadium	50.0	47.9		mg/Kg		96	80 - 120
Zinc	50.0	44.8		mg/Kg		90	80 - 120

Lab Sample ID: 500-151344-23 MS
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.39	J F1	26.1	5.61	F1	mg/Kg	☼	20	75 - 125
Arsenic	6.2	F1	5.21	9.49	F1	mg/Kg	☼	64	75 - 125
Barium	17		104	117		mg/Kg	☼	95	75 - 125
Beryllium	0.38		2.61	2.61		mg/Kg	☼	86	75 - 125

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-151344-23 MS
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	16		52.1	63.9		mg/Kg	☼	92	75 - 125
Cadmium	0.13	B	2.61	2.55		mg/Kg	☼	93	75 - 125
Chromium	9.1		10.4	19.7		mg/Kg	☼	102	75 - 125
Cobalt	5.7		26.1	30.2		mg/Kg	☼	94	75 - 125
Copper	18	B	13.0	32.5		mg/Kg	☼	114	75 - 125
Iron	11000	B	52.1	10800	4	mg/Kg	☼	373	75 - 125
Lead	28		5.21	33.1	4	mg/Kg	☼	91	75 - 125
Manganese	170	B	26.1	211	4	mg/Kg	☼	153	75 - 125
Nickel	16		26.1	40.3		mg/Kg	☼	94	75 - 125
Potassium	1800	F1	521	3710	F1	mg/Kg	☼	376	75 - 125
Selenium	<0.51	F1	5.21	3.99		mg/Kg	☼	76	75 - 125
Silver	0.11	J	2.61	2.52		mg/Kg	☼	93	75 - 125
Sodium	660		521	1230		mg/Kg	☼	110	75 - 125
Thallium	<0.51		5.21	4.38		mg/Kg	☼	84	75 - 125
Vanadium	12		26.1	37.6		mg/Kg	☼	98	75 - 125
Zinc	27	F1 F2	26.1	82.0	F1	mg/Kg	☼	212	75 - 125

Lab Sample ID: 500-151344-23 MS
Matrix: Solid
Analysis Batch: 450908

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	130000	B	521	118000	4	mg/Kg	☼	-2808	75 - 125

Lab Sample ID: 500-151344-23 MSD
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.39	J F1	26.3	6.10	F1	mg/Kg	☼	22	75 - 125	8	20
Arsenic	6.2	F1	5.27	10.7		mg/Kg	☼	86	75 - 125	12	20
Barium	17		105	113		mg/Kg	☼	91	75 - 125	3	20
Beryllium	0.38		2.63	2.61		mg/Kg	☼	85	75 - 125	0	20
Boron	16		52.7	63.8		mg/Kg	☼	91	75 - 125	0	20
Cadmium	0.13	B	2.63	2.53		mg/Kg	☼	91	75 - 125	1	20
Chromium	9.1		10.5	18.6		mg/Kg	☼	91	75 - 125	5	20
Cobalt	5.7		26.3	29.5		mg/Kg	☼	90	75 - 125	2	20
Copper	18	B	13.2	29.8		mg/Kg	☼	92	75 - 125	9	20
Iron	11000	B	52.7	10900	4	mg/Kg	☼	651	75 - 125	1	20
Lead	28		5.27	32.3	4	mg/Kg	☼	76	75 - 125	2	20
Manganese	170	B	26.3	201	4	mg/Kg	☼	115	75 - 125	5	20
Nickel	16		26.3	38.9		mg/Kg	☼	88	75 - 125	3	20
Potassium	1800	F1	527	3450	F1	mg/Kg	☼	322	75 - 125	7	20
Selenium	<0.51	F1	5.27	3.85	F1	mg/Kg	☼	73	75 - 125	4	20
Silver	0.11	J	2.63	2.47		mg/Kg	☼	90	75 - 125	2	20
Sodium	660		527	1180		mg/Kg	☼	100	75 - 125	4	20
Thallium	<0.51		5.27	4.35		mg/Kg	☼	83	75 - 125	1	20
Vanadium	12		26.3	36.5		mg/Kg	☼	93	75 - 125	3	20
Zinc	27	F1 F2	26.3	57.6	F2	mg/Kg	☼	118	75 - 125	35	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Lab Sample ID: 500-151344-23 MSD
Matrix: Solid
Analysis Batch: 450908

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	130000	B	527	123000	4	mg/Kg	☼	-1832	75 - 125	4	20

Lab Sample ID: 500-151344-23 DU
Matrix: Solid
Analysis Batch: 450602

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	0.39	J F1	0.253	J F5	mg/Kg	☼	43	20
Arsenic	6.2	F1	4.23	F3	mg/Kg	☼	37	20
Barium	17		16.6		mg/Kg	☼	5	20
Beryllium	0.38		0.260	F5	mg/Kg	☼	37	20
Boron	16		15.2		mg/Kg	☼	4	20
Cadmium	0.13	B	0.183	F5	mg/Kg	☼	32	20
Chromium	9.1		7.03	F3	mg/Kg	☼	25	20
Cobalt	5.7		3.16	F3	mg/Kg	☼	58	20
Copper	18	B	10.1	F3	mg/Kg	☼	55	20
Iron	11000	B	7280	F3	mg/Kg	☼	37	20
Lead	28		24.5		mg/Kg	☼	15	20
Manganese	170	B	156		mg/Kg	☼	9	20
Nickel	16		9.69	F3	mg/Kg	☼	47	20
Potassium	1800	F1	1410	F3	mg/Kg	☼	22	20
Selenium	<0.51	F1	0.452	J	mg/Kg	☼	NC	20
Silver	0.11	J	<0.25		mg/Kg	☼	NC	20
Sodium	660		549		mg/Kg	☼	18	20
Thallium	<0.51		<0.51		mg/Kg	☼	NC	20
Vanadium	12		9.85		mg/Kg	☼	20	20
Zinc	27	F1 F2	36.3	F3	mg/Kg	☼	31	20

Lab Sample ID: 500-151344-23 DU
Matrix: Solid
Analysis Batch: 450908

Client Sample ID: 2615V-118-B10 (0-5)
Prep Type: Total/NA
Prep Batch: 450347

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Calcium	130000	B	152000		mg/Kg	☼	14	20

Lab Sample ID: LCS 500-450389/2-A
Matrix: Solid
Analysis Batch: 450589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.0983		mg/L		98	80 - 120
Manganese	0.500	0.491		mg/L		98	80 - 120

Lab Sample ID: LCS 500-450390/2-A
Matrix: Solid
Analysis Batch: 450589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.0929		mg/L		93	80 - 120
Manganese	0.500	0.467		mg/L		93	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-450391/2-A
Matrix: Solid
Analysis Batch: 450844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.500		mg/L		100	80 - 120
Beryllium	0.0500	0.0509		mg/L		102	80 - 120
Boron	1.00	1.00		mg/L		100	80 - 120
Cadmium	0.0500	0.0501		mg/L		100	80 - 120
Chromium	0.200	0.205		mg/L		102	80 - 120
Cobalt	0.500	0.490	^	mg/L		98	80 - 120
Iron	1.00	0.999		mg/L		100	80 - 120
Lead	0.100	0.0997		mg/L		100	80 - 120
Manganese	0.500	0.509		mg/L		102	80 - 120
Nickel	0.500	0.494		mg/L		99	80 - 120
Selenium	0.100	0.0910		mg/L		91	80 - 120
Silver	0.0500	0.0492		mg/L		98	80 - 120
Zinc	0.500	0.486	J	mg/L		97	80 - 120

Lab Sample ID: LCS 500-450393/2-A
Matrix: Solid
Analysis Batch: 451042

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.487	J	mg/L		97	80 - 120
Beryllium	0.0500	0.0498		mg/L		100	80 - 120
Boron	1.00	0.895		mg/L		89	80 - 120
Cadmium	0.0500	0.0476		mg/L		95	80 - 120
Chromium	0.200	0.207		mg/L		103	80 - 120
Cobalt	0.500	0.494		mg/L		99	80 - 120
Iron	1.00	1.01		mg/L		101	80 - 120
Manganese	0.500	0.497		mg/L		99	80 - 120
Nickel	0.500	0.491		mg/L		98	80 - 120
Selenium	0.100	0.0870		mg/L		87	80 - 120
Silver	0.0500	0.0492		mg/L		98	80 - 120
Zinc	0.500	0.488	J	mg/L		98	80 - 120

Lab Sample ID: LCS 500-450393/2-A
Matrix: Solid
Analysis Batch: 451252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LB 500-450138/1-B
Matrix: Solid
Analysis Batch: 450844

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450391

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 19:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 19:22	1
Boron	<0.50		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 19:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 19:22	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 19:22	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-450138/1-B
Matrix: Solid
Analysis Batch: 450844

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450391

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cobalt	<0.025	^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 19:22	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 19:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 19:22	1
Manganese	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 19:22	1
Nickel	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 19:22	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 19:22	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 19:22	1
Zinc	0.0277	J	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 19:22	1

Lab Sample ID: LB2 500-450139/1-C
Matrix: Solid
Analysis Batch: 450844

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450391

Analyte	LB2 LB2		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:44	09/19/18 21:27	1
Boron	<0.50		0.50	0.050	mg/L		09/18/18 07:44	09/19/18 21:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:44	09/19/18 21:27	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:27	1
Cobalt	<0.025	^	0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:27	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:44	09/19/18 21:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:44	09/19/18 21:27	1
Manganese	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:27	1
Nickel	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:27	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:44	09/19/18 21:27	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:44	09/19/18 21:27	1
Zinc	0.0328	J	0.50	0.020	mg/L		09/18/18 07:44	09/19/18 21:27	1

Lab Sample ID: 500-151344-7 MS
Matrix: Solid
Analysis Batch: 450844

Client Sample ID: 2615V-118-B09 (39-47)
Prep Type: TCLP
Prep Batch: 450391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Barium	0.52		0.500	1.04		mg/L		102	75 - 125
Beryllium	<0.0040		0.0500	0.0521		mg/L		104	75 - 125
Boron	0.12	J	1.00	1.18		mg/L		106	75 - 125
Cadmium	<0.0050		0.0500	0.0486		mg/L		97	75 - 125
Chromium	<0.025		0.200	0.202		mg/L		101	75 - 125
Cobalt	0.019	J ^	0.500	0.494	^	mg/L		95	75 - 125
Iron	<0.40		1.00	1.06		mg/L		106	75 - 125
Lead	<0.0075		0.100	0.0998		mg/L		100	75 - 125
Manganese	2.0		0.500	2.57		mg/L		116	75 - 125
Nickel	0.043		0.500	0.520		mg/L		95	75 - 125
Selenium	<0.050		0.100	0.0935		mg/L		94	75 - 125
Silver	<0.025		0.0500	0.0542		mg/L		108	75 - 125
Zinc	0.058	J B	0.500	0.574		mg/L		103	75 - 125

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-151344-7 DU

Matrix: Solid

Analysis Batch: 450844

Client Sample ID: 2615V-118-B09 (39-47)

Prep Type: TCLP

Prep Batch: 450391

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Barium	0.52		0.517		mg/L		1	20	
Beryllium	<0.0040		<0.0040		mg/L		NC	20	
Boron	0.12	J	0.121	J	mg/L		1	20	
Cadmium	<0.0050		<0.0050		mg/L		NC	20	
Chromium	<0.025		<0.025		mg/L		NC	20	
Cobalt	0.019	J ^	0.0192	J ^	mg/L		0.8	20	
Iron	<0.40		<0.40		mg/L		NC	20	
Lead	<0.0075		<0.0075		mg/L		NC	20	
Manganese	2.0		1.97		mg/L		1	20	
Nickel	0.043		0.0435		mg/L		0.3	20	
Selenium	<0.050		<0.050		mg/L		NC	20	
Silver	<0.025		<0.025		mg/L		NC	20	
Zinc	0.058	J B	0.0574	J	mg/L		1	20	

Lab Sample ID: LB 500-450140/1-C

Matrix: Solid

Analysis Batch: 451042

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 450393

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		09/18/18 07:47	09/21/18 00:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		09/18/18 07:47	09/21/18 00:31	1
Boron	<0.50		0.50	0.050	mg/L		09/18/18 07:47	09/21/18 00:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/18/18 07:47	09/21/18 00:31	1
Chromium	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:31	1
Cobalt	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:31	1
Iron	<0.40		0.40	0.20	mg/L		09/18/18 07:47	09/21/18 00:31	1
Manganese	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:31	1
Nickel	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:31	1
Selenium	<0.050		0.050	0.020	mg/L		09/18/18 07:47	09/21/18 00:31	1
Silver	<0.025		0.025	0.010	mg/L		09/18/18 07:47	09/21/18 00:31	1
Zinc	<0.50		0.50	0.020	mg/L		09/18/18 07:47	09/21/18 00:31	1

Lab Sample ID: LB 500-450140/1-C

Matrix: Solid

Analysis Batch: 451252

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 450393

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:47	09/21/18 16:07	1

Lab Sample ID: LB 500-450136/1-B

Matrix: Solid

Analysis Batch: 450589

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 450389

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:37	09/18/18 19:43	1
Manganese	<0.025		0.025	0.010	mg/L		09/18/18 07:37	09/18/18 19:43	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-151344-20 MS

Matrix: Solid

Analysis Batch: 450589

Client Sample ID: 2615V-118-B12 (23-31)

Prep Type: SPLP East

Prep Batch: 450389

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Lead	<0.0075		0.100	0.0983		mg/L		98	75 - 125
Manganese	0.099		0.500	0.593		mg/L		99	75 - 125

Lab Sample ID: 500-151344-20 DU

Matrix: Solid

Analysis Batch: 450589

Client Sample ID: 2615V-118-B12 (23-31)

Prep Type: SPLP East

Prep Batch: 450389

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.099		0.0905		mg/L		9	20

Lab Sample ID: LB 500-450137/1-B

Matrix: Solid

Analysis Batch: 450589

Client Sample ID: Method Blank

Prep Type: SPLP East

Prep Batch: 450390

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		09/18/18 07:41	09/18/18 18:24	1
Manganese	<0.025		0.025	0.010	mg/L		09/18/18 07:41	09/18/18 18:24	1

Lab Sample ID: 500-151344-30 MS

Matrix: Solid

Analysis Batch: 450589

Client Sample ID: 2615V-118-B10 (39-47) D

Prep Type: SPLP East

Prep Batch: 450390

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Lead	<0.0075		0.100	0.0961		mg/L		96	75 - 125
Manganese	0.043		0.500	0.512		mg/L		94	75 - 125

Lab Sample ID: 500-151344-30 DU

Matrix: Solid

Analysis Batch: 450589

Client Sample ID: 2615V-118-B10 (39-47) D

Prep Type: SPLP East

Prep Batch: 450390

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.043		0.0395		mg/L		9	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-450391/2-A

Matrix: Solid

Analysis Batch: 450647

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450391

Analyte	Spike	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.478		mg/L		96	80 - 120
Thallium	0.100	0.102		mg/L		102	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-450393/2-A
Matrix: Solid
Analysis Batch: 450894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450393

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.483		mg/L		97	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LB 500-450138/1-B
Matrix: Solid
Analysis Batch: 450647

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450391

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.00810		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 01:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 01:42	1

Lab Sample ID: LB2 500-450139/1-C
Matrix: Solid
Analysis Batch: 450647

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450391

Analyte	LB2		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:44	09/19/18 03:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:44	09/19/18 03:29	1

Lab Sample ID: 500-151344-7 MS
Matrix: Solid
Analysis Batch: 450647

Client Sample ID: 2615V-118-B09 (39-47)
Prep Type: TCLP
Prep Batch: 450391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Antimony	<0.0060		0.500	0.465		mg/L		93	75 - 125
Thallium	<0.0020		0.100	0.0941		mg/L		94	75 - 125

Lab Sample ID: 500-151344-7 DU
Matrix: Solid
Analysis Batch: 450647

Client Sample ID: 2615V-118-B09 (39-47)
Prep Type: TCLP
Prep Batch: 450391

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: LB 500-450140/1-C
Matrix: Solid
Analysis Batch: 450894

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450393

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		09/18/18 07:47	09/19/18 19:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		09/18/18 07:47	09/19/18 19:26	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-450263/12-A
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/17/18 12:17	09/18/18 08:48	1

Lab Sample ID: LCS 500-450263/13-A
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00200		mg/L		100	80 - 120

Lab Sample ID: MB 500-450273/12-A
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/17/18 12:17	09/18/18 09:42	1

Lab Sample ID: LCS 500-450273/13-A
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450273

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00200		mg/L		100	80 - 120

Lab Sample ID: MB 500-450441/12-A
Matrix: Solid
Analysis Batch: 450661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 07:54	1

Lab Sample ID: LCS 500-450441/13-A
Matrix: Solid
Analysis Batch: 450661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00191		mg/L		95	80 - 120

Lab Sample ID: LB2 500-450139/1-B
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450263

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/17/18 12:17	09/18/18 09:38	1

Lab Sample ID: LB 500-450140/1-B
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450273

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/17/18 12:17	09/18/18 09:45	1

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Lab Sample ID: 500-151344-24 MS
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: 2615V-118-B10 (5-10)
Prep Type: TCLP
Prep Batch: 450273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00109		mg/L		109	75 - 125

Lab Sample ID: 500-151344-24 DU
Matrix: Solid
Analysis Batch: 450431

Client Sample ID: 2615V-118-B10 (5-10)
Prep Type: TCLP
Prep Batch: 450273

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Lab Sample ID: LB 500-450138/1-C
Matrix: Solid
Analysis Batch: 450661

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 450441

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		09/18/18 11:12	09/19/18 07:57	1

Lab Sample ID: 500-151344-10 MS
Matrix: Solid
Analysis Batch: 450661

Client Sample ID: 2615V-118-B35 (10-15)
Prep Type: TCLP
Prep Batch: 450441

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.000761		mg/L		76	75 - 125

Lab Sample ID: 500-151344-10 DU
Matrix: Solid
Analysis Batch: 450661

Client Sample ID: 2615V-118-B35 (10-15)
Prep Type: TCLP
Prep Batch: 450441

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-450696/12-A
Matrix: Solid
Analysis Batch: 450953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 450696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		09/19/18 16:36	09/20/18 13:08	1

Lab Sample ID: LCS 500-450696/13-A
Matrix: Solid
Analysis Batch: 450953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 450696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.169		mg/Kg		102	80 - 120

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-151344-3 MS

Matrix: Solid

Analysis Batch: 450953

Client Sample ID: 2615V-118-B09 (10-15)

Prep Type: Total/NA

Prep Batch: 450696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.025		0.0951	0.126		mg/Kg	☼	106	75 - 125

Lab Sample ID: 500-151344-3 MSD

Matrix: Solid

Analysis Batch: 450953

Client Sample ID: 2615V-118-B09 (10-15)

Prep Type: Total/NA

Prep Batch: 450696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.025		0.0941	0.127		mg/Kg	☼	108	75 - 125	1	20

Lab Sample ID: 500-151344-3 DU

Matrix: Solid

Analysis Batch: 450953

Client Sample ID: 2615V-118-B09 (10-15)

Prep Type: Total/NA

Prep Batch: 450696

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.025		0.0251		mg/Kg	☼	1	20

Lab Sample ID: MB 500-450927/12-A

Matrix: Solid

Analysis Batch: 451171

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450927

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		09/20/18 16:55	09/21/18 11:34	1

Lab Sample ID: LCS 500-450927/13-A

Matrix: Solid

Analysis Batch: 451171

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.171		mg/Kg		103	80 - 120

Lab Sample ID: 500-151344-22 MS

Matrix: Solid

Analysis Batch: 451171

Client Sample ID: 2615V-118-B12 (39-47)

Prep Type: Total/NA

Prep Batch: 450927

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.028		0.0997	0.144		mg/Kg	☼	117	75 - 125

Lab Sample ID: 500-151344-22 MSD

Matrix: Solid

Analysis Batch: 451171

Client Sample ID: 2615V-118-B12 (39-47)

Prep Type: Total/NA

Prep Batch: 450927

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.028		0.101	0.147		mg/Kg	☼	119	75 - 125	2	20

Lab Sample ID: 500-151344-22 DU

Matrix: Solid

Analysis Batch: 451171

Client Sample ID: 2615V-118-B12 (39-47)

Prep Type: Total/NA

Prep Batch: 450927

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.028		0.0195	J F5	mg/Kg	☼	35	20

TestAmerica Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Method: 9045D - pH

Lab Sample ID: 500-151344-20 DU
Matrix: Solid
Analysis Batch: 450947

Client Sample ID: 2615V-118-B12 (23-31)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.7		8.68		SU		0.2	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (0-5)

Lab Sample ID: 500-151344-1

Date Collected: 09/12/18 09:10

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:51	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:12	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 19:39	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 01:49	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 07:59	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:00		
					(End)	09/20/18 11:02		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (0-5)

Lab Sample ID: 500-151344-1

Date Collected: 09/12/18 09:10

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450856	09/20/18 14:37	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 19:21	AJD	TAL CHI
Total/NA	Prep	3541	DL		450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D	DL	5	451400	09/24/18 12:44	STW	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 04:23	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 13:42	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 13:46	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:32	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (5-10)

Lab Sample ID: 500-151344-2

Date Collected: 09/12/18 09:15

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:55	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:16	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 19:43	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 01:53	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:01	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:02		
					(End)	09/20/18 11:04		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (5-10)

Lab Sample ID: 500-151344-2

Date Collected: 09/12/18 09:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450856	09/20/18 15:05	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 10:27	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 04:56	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 14:29	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 14:34	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:34	MJG	TAL CHI

Client Sample ID: 2615V-118-B09 (10-15)

Lab Sample ID: 500-151344-3

Date Collected: 09/12/18 09:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (10-15)

Lab Sample ID: 500-151344-3

Date Collected: 09/12/18 09:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:00	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 19:47	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 01:56	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:04		
					(End)	09/20/18 11:07		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (10-15)

Lab Sample ID: 500-151344-3

Date Collected: 09/12/18 09:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450605	09/19/18 12:51	DJD	TAL CHI
Total/NA	Prep	3541			451519	09/24/18 20:33	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	451567	09/25/18 12:12	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:00	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 14:37	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 14:42	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:36	MJG	TAL CHI

Client Sample ID: 2615V-118-B09 (15-23)

Lab Sample ID: 500-151344-4

Date Collected: 09/12/18 09:25

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:04	EEN	TAL CHI
TCLP	Leach	1311			450139	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (15-23)

Lab Sample ID: 500-151344-4

Date Collected: 09/12/18 09:25

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6010B		1	451042	09/21/18 02:58	JEF	TAL CHI
TCLP	Leach	1311			450139	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 21:31	JEF	TAL CHI
TCLP	Leach	1311			450139	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 03:32	FXG	TAL CHI
TCLP	Leach	1311			450139	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450263	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 09:40	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:07		
					(End)	09/20/18 11:09		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (15-23)

Lab Sample ID: 500-151344-4

Date Collected: 09/12/18 09:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450605	09/19/18 17:38	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 11:17	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:04	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 14:45	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 14:49	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:43	MJG	TAL CHI

Client Sample ID: 2615V-118-B09 (23-31)

Lab Sample ID: 500-151344-5

Date Collected: 09/12/18 09:30

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:08	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 19:51	JEF	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (23-31)

Lab Sample ID: 500-151344-5

Date Collected: 09/12/18 09:30

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:00	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:04	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947	(Start) 09/20/18 11:09 (End) 09/20/18 11:11	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (23-31)

Lab Sample ID: 500-151344-5

Date Collected: 09/12/18 09:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450605	09/19/18 18:03	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 11:43	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:08	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 14:53	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 14:58	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:45	MJG	TAL CHI

Client Sample ID: 2615V-118-B09 (31-39)

Lab Sample ID: 500-151344-6

Date Collected: 09/12/18 09:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:20	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 19:55	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:04	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (31-39)

Lab Sample ID: 500-151344-6

Date Collected: 09/12/18 09:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947	09/20/18 11:11 (Start) 09/20/18 11:14 (End)	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (31-39)

Lab Sample ID: 500-151344-6

Date Collected: 09/12/18 09:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450605	09/19/18 18:29	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 12:08	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:12	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 15:01	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 15:06	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:47	MJG	TAL CHI

Client Sample ID: 2615V-118-B09 (39-47)

Lab Sample ID: 500-151344-7

Date Collected: 09/12/18 09:55

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:25	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 19:59	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:07	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:07	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B09 (39-47)

Lab Sample ID: 500-151344-7

Date Collected: 09/12/18 09:55

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:14		
					(End)	09/20/18 11:16		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B09 (39-47)

Lab Sample ID: 500-151344-7

Date Collected: 09/12/18 09:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450605	09/19/18 18:55	DJD	TAL CHI
Total/NA	Prep	3541			451519	09/24/18 20:33	NRJ	TAL CHI
Total/NA	Analysis	8270D		1	451567	09/25/18 12:41	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:17	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 15:17	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 15:22	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:52	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:29	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:20	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:24	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:30	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:12	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947	09/20/18 11:16 (Start) 09/20/18 11:19 (End)	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B35 (0-5)

Lab Sample ID: 500-151344-8

Date Collected: 09/12/18 10:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450605	09/19/18 19:21	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 12:59	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:21	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 15:25	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 15:30	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:54	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:33	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:25	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:29	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:33	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:13	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947	09/20/18 11:19 (Start) 09/20/18 11:21 (End)	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B35 (5-10)

Lab Sample ID: 500-151344-9

Date Collected: 09/12/18 10:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 16:41	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 13:25	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:33	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 15:33	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 15:38	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:55	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:37	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:29	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:33	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:37	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:15	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947	09/20/18 11:21 (Start) 09/20/18 11:23 (End)	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B35 (10-15)

Lab Sample ID: 500-151344-10

Date Collected: 09/12/18 10:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 17:06	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 13:50	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:37	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 15:41	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 15:46	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:57	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:41	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:33	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:37	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:41	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:20	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947	(Start) 09/20/18 11:23 (End) 09/20/18 11:26	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B35 (15-23)

Lab Sample ID: 500-151344-11

Date Collected: 09/12/18 10:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 17:31	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 14:16	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:41	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 15:50	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 15:54	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 13:59	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:45	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:37	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:41	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:44	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:22	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:26		
					(End)	09/20/18 11:28		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B35 (23-31)

Lab Sample ID: 500-151344-12

Date Collected: 09/12/18 10:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 17:56	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 14:41	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:45	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 16:06	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 16:10	JEF	TAL CHI
Total/NA	Prep	7471B			450696	09/19/18 16:36	MJG	TAL CHI
Total/NA	Analysis	7471B		1	450953	09/20/18 14:01	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:50	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:45	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:48	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:23	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:28		
					(End)	09/20/18 11:31		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (31-39)

Lab Sample ID: 500-151344-13

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 18:22	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 15:06	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:50	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 16:14	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 16:18	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:37	MJG	TAL CHI

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:54	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:49	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:52	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:25	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:31		
					(End)	09/20/18 11:33		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 18:47	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 15:32	AJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B35 (39-47)

Lab Sample ID: 500-151344-14

Date Collected: 09/12/18 10:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:54	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 16:22	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 16:26	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:39	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 20:58	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:53	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 02:55	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947	(Start) 09/20/18 11:33 (End) 09/20/18 11:35	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 19:12	DJD	TAL CHI
Total/NA	Prep	3541			450846	09/20/18 07:45	JVD	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 15:57	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 05:58	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 16:30	JEF	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (0-5)

Lab Sample ID: 500-151344-15

Date Collected: 09/12/18 11:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:41	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 21:10	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:42	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 20:58	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 03:10	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:32	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:35		
					(End)	09/20/18 11:38		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 19:37	DJD	TAL CHI
Total/NA	Prep	3541			450787	09/19/18 18:35	JP1	TAL CHI
Total/NA	Analysis	8270D		1	450862	09/20/18 15:51	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 06:02	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 16:37	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 16:41	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (5-10)

Lab Sample ID: 500-151344-16

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	451171	09/21/18 11:42	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 21:15	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 02:46	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 21:02	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 03:14	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:33	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:38		
					(End)	09/20/18 11:40		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (5-10) D

Lab Sample ID: 500-151344-17

Date Collected: 09/12/18 11:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/19/18 23:28	DJD	TAL CHI
Total/NA	Prep	3541			450787	09/19/18 18:35	JP1	TAL CHI
Total/NA	Analysis	8270D		1	450862	09/20/18 16:16	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 06:06	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 16:53	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 16:57	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:44	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Date Collected: 09/12/18 11:25

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 21:19	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 21:14	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 03:18	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:35	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:40		
					(End)	09/20/18 11:42		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (10-15)

Lab Sample ID: 500-151344-18

Date Collected: 09/12/18 11:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/19/18 23:53	DJD	TAL CHI
Total/NA	Prep	3541			450787	09/19/18 18:35	JP1	TAL CHI
Total/NA	Analysis	8270D		1	450862	09/20/18 16:41	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 06:10	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 17:01	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 17:05	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:46	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 21:23	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 21:18	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6020A		1	450647	09/19/18 03:21	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:36	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:42		
					(End)	09/20/18 11:45		
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (15-23)

Lab Sample ID: 500-151344-19

Date Collected: 09/12/18 11:30

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 00:19	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 19:46	AJD	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 06:22	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 17:09	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 17:13	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:48	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450136	09/16/18 15:25	GCA	TAL CHI
SPLP East	Prep	3010A			450389	09/18/18 07:37	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 21:27	EEN	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI
TCLP	Analysis	6010B		1	450844	09/19/18 21:23	JEF	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	3010A			450391	09/18/18 07:44	SAH	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6020A		1	450647	09/19/18 03:25	FXG	TAL CHI
TCLP	Leach	1311			450138	09/16/18 14:00	GCA	TAL CHI
TCLP	Prep	7470A			450441	09/18/18 11:12	MJG	TAL CHI
TCLP	Analysis	7470A		1	450661	09/19/18 08:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947	(Start) 09/20/18 11:45 (End) 09/20/18 11:47	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450246	09/17/18 10:41	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (23-31)

Lab Sample ID: 500-151344-20

Date Collected: 09/12/18 11:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 00:45	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451274	09/22/18 22:54	GES	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450909	09/20/18 06:27	EEN	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		1	451249	09/21/18 17:17	JEF	TAL CHI
Total/NA	Prep	3050B			450335	09/18/18 08:03	SAH	TAL CHI
Total/NA	Analysis	6010B		5	451249	09/21/18 17:21	JEF	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:53	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 18:41	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 00:40	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:11	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450894	09/19/18 19:34	FXG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 09:47	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:50		
					(End)	09/20/18 11:52		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (31-39)

Lab Sample ID: 500-151344-21

Date Collected: 09/12/18 11:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 01:10	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 16:23	AJD	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 19:31	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 21:10	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:55	MJG	TAL CHI

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 18:45	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 00:44	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:15	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450894	09/19/18 19:38	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 09:48	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	450947	09/20/18 11:52 (Start) 09/20/18 11:54 (End)	RRP	TAL CHI
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B12 (39-47)

Lab Sample ID: 500-151344-22

Date Collected: 09/12/18 11:55

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 01:36	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451274	09/22/18 23:45	GES	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 19:35	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 21:22	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 11:56	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (0-5)

Lab Sample ID: 500-151344-23

Date Collected: 09/12/18 13:05

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 18:49	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 00:48	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:20	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450894	09/19/18 19:41	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 09:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947	09/20/18 11:54 (Start) 09/20/18 11:57 (End)	RRP	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (0-5)

Lab Sample ID: 500-151344-23

Date Collected: 09/12/18 13:05

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (0-5)

Lab Sample ID: 500-151344-23

Date Collected: 09/12/18 13:05

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 02:01	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451274	09/23/18 00:10	GES	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 19:39	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		20	450908	09/19/18 21:26	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:04	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (5-10)

Lab Sample ID: 500-151344-24

Date Collected: 09/12/18 13:10

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 18:53	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 00:52	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:24	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450894	09/19/18 19:45	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 09:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:57		
					(End)	09/20/18 11:59		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (5-10)

Lab Sample ID: 500-151344-24

Date Collected: 09/12/18 13:10

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 02:26	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451274	09/23/18 00:36	GES	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:08	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 21:46	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:06	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (10-15)

Lab Sample ID: 500-151344-25

Date Collected: 09/12/18 13:15

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 18:57	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 00:56	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:36	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450894	09/19/18 19:49	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 10:00	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 11:59		
					(End)	09/20/18 12:02		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (10-15)

Lab Sample ID: 500-151344-25

Date Collected: 09/12/18 13:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 02:51	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (10-15)

Lab Sample ID: 500-151344-25

Date Collected: 09/12/18 13:15

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		1	451400	09/24/18 13:09	STW	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:12	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 21:50	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:07	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (15-23)

Lab Sample ID: 500-151344-26

Date Collected: 09/12/18 13:20

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:01	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 01:01	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:40	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450964	09/20/18 14:27	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 10:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
						(Start) 09/20/18 12:02		
						(End) 09/20/18 12:04		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (15-23)

Lab Sample ID: 500-151344-26

Date Collected: 09/12/18 13:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 03:17	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 17:14	AJD	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:16	EEN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (15-23)

Lab Sample ID: 500-151344-26

Date Collected: 09/12/18 13:20

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 21:54	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:09	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (23-31)

Lab Sample ID: 500-151344-27

Date Collected: 09/12/18 13:25

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:06	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 01:17	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:45	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450964	09/20/18 14:30	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 10:04	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 12:04		
					(End)	09/20/18 12:06		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (23-31)

Lab Sample ID: 500-151344-27

Date Collected: 09/12/18 13:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450699	09/20/18 03:42	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 17:39	AJD	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:20	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 21:58	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (23-31)

Lab Sample ID: 500-151344-27

Date Collected: 09/12/18 13:25

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	451171	09/21/18 12:15	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (31-39)

Lab Sample ID: 500-151344-28

Date Collected: 09/12/18 13:35

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:10	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 01:21	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:49	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450964	09/20/18 14:34	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 10:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 12:06		
					(End)	09/20/18 12:09		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (31-39)

Lab Sample ID: 500-151344-28

Date Collected: 09/12/18 13:35

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 12:51	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 18:05	AJD	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:24	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 22:14	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:16	MJG	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (39-47)

Lab Sample ID: 500-151344-29

Date Collected: 09/12/18 13:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:14	EEN	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 01:25	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:53	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450964	09/20/18 14:38	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 10:07	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 12:09		
					(End)	09/20/18 12:11		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (39-47)

Lab Sample ID: 500-151344-29

Date Collected: 09/12/18 13:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450606	09/19/18 12:26	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 18:30	AJD	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:28	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 22:17	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:18	MJG	TAL CHI

Client Sample ID: 2615V-118-B10 (39-47) D

Lab Sample ID: 500-151344-30

Date Collected: 09/12/18 13:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			450137	09/16/18 14:00	GCA	TAL CHI
SPLP East	Prep	3010A			450390	09/18/18 07:41	SAH	TAL CHI
SPLP East	Analysis	6010B		1	450589	09/18/18 19:18	EEN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Client Sample ID: 2615V-118-B10 (39-47) D

Lab Sample ID: 500-151344-30

Date Collected: 09/12/18 13:45

Matrix: Solid

Date Received: 09/12/18 19:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451042	09/21/18 01:30	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6010B		1	451252	09/21/18 16:57	JEF	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	3010A			450393	09/18/18 07:47	SAH	TAL CHI
TCLP	Analysis	6020A		1	450964	09/20/18 14:42	FXG	TAL CHI
TCLP	Leach	1311			450140	09/16/18 15:00	GCA	TAL CHI
TCLP	Prep	7470A			450273	09/17/18 12:17	MJG	TAL CHI
TCLP	Analysis	7470A		1	450431	09/18/18 10:08	MJG	TAL CHI
Total/NA	Analysis	9045D		1	450947		RRP	TAL CHI
					(Start)	09/20/18 12:11		
					(End)	09/20/18 12:14		
Total/NA	Analysis	Moisture		1	450247	09/17/18 11:40	PFK	TAL CHI

Client Sample ID: 2615V-118-B10 (39-47) D

Lab Sample ID: 500-151344-30

Date Collected: 09/12/18 13:45

Matrix: Solid

Date Received: 09/12/18 19:42

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			450284	09/12/18 20:20	DJD	TAL CHI
Total/NA	Analysis	8260B		1	450856	09/20/18 15:59	DJD	TAL CHI
Total/NA	Prep	3541			450775	09/19/18 17:40	JP1	TAL CHI
Total/NA	Analysis	8270D		1	451317	09/23/18 18:55	AJD	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		1	450602	09/18/18 20:32	EEN	TAL CHI
Total/NA	Prep	3050B			450347	09/18/18 08:19	SAH	TAL CHI
Total/NA	Analysis	6010B		10	450908	09/19/18 22:21	EEN	TAL CHI
Total/NA	Prep	7471B			450927	09/20/18 16:55	MJG	TAL CHI
Total/NA	Analysis	7471B		1	451171	09/21/18 12:20	MJG	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO043A

TestAmerica Job ID: 500-151344-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To: *Dean Tiebout* (optional)
 Contact: _____
 Company: *E+E*
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To: _____ (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____ 500-151344 COC
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: *500-151344*
 Chain of Custody Number: _____
 Page *1* of *3*
 Temperature °C of Cooler: *4.3, 5.6*

Client		Client Project #		Preservative		Parameter		Comments		
<i>ED1</i>		<i>945-021</i>						Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Project Location/State		Lab Project #		Sampler				
<i>IDOT 176-001-43</i>		<i>Chicago, IL</i>				<i>A. Pacyga</i>				
						<i>Richard Wright</i>				
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix				
			Date	Time						
<i>1</i>		<i>2615V-118-B09(0-5)</i>	<i>9-12-18</i>	<i>0910</i>	<i>4</i>	<i>S</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>
<i>2</i>				<i>0915</i>						
<i>3</i>				<i>0920</i>						
<i>4</i>				<i>0925</i>						
<i>5</i>				<i>0920</i>						
<i>6</i>				<i>0945</i>						
<i>7</i>				<i>0955</i>						
<i>8</i>		<i>2615V-118-B35(0-5)</i>		<i>1015</i>						
<i>9</i>				<i>1020</i>						
<i>10</i>				<i>1025</i>						

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <i>[Signature]</i>	Company: <i>ED1</i>	Date: <i>9-12-18</i>	Time: <i>1445</i>	Received By: <i>[Signature]</i>	Company: <i>TA</i>	Date: <i>9/12/18</i>	Time: <i>1445</i>
Relinquished By: <i>[Signature]</i>	Company: <i>TA</i>	Date: <i>9/12/18</i>	Time: <i>1630</i>	Received By: _____	Company: _____	Date: _____	Time: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: _____
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Aaron Tiebout
 Contact: E TE
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional) _____
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-15344
 Chain of Custody Number: _____
 Page 2 of 3
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Comments			
<u>ED1</u>		<u>945-021</u>						Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other			
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM			
<u>100T 176-001-43</u>		<u>Chicago, IL</u>				<u>A-Pacyga</u>		<u>Richard Wraight</u>			
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total Metal	TCLP Metal	Comments
			Date	Time							
<u>11</u>		<u>2615V-118-B35(15-23)</u>	<u>9-12-18</u>	<u>1030</u>	<u>4</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>12</u>		<u>(23-31)</u>		<u>1035</u>							
<u>13</u>		<u>(31-39)</u>		<u>1045</u>							
<u>14</u>		<u>(39-47)</u>		<u>1055</u>							
<u>15</u>		<u>-B12(0-5)</u>		<u>1115</u>							
<u>16</u>		<u>(5-10)</u>		<u>1120</u>							
<u>17</u>		<u>(5-10)</u>		<u>1120</u>							
<u>18</u>		<u>(10-15)</u>		<u>1125</u>							
<u>19</u>		<u>(15-23)</u>		<u>1130</u>							
<u>20</u>		<u>(23-31)</u>		<u>1135</u>							

Turnaround Time Required (Business Days) _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>ED1</u>	Date: <u>9-12-18</u>	Time: <u>1445</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>9/12/18</u>	Time: <u>1445</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>9/12/18</u>	Time: <u>1630</u>	Received By: _____	Company: _____	Date: _____	Time: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: _____
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater
 W - Water
 S - Soil
 SL - Sludge
 MS - Miscellaneous
 OL - Oil
 A - Air
 SE - Sediment
 SO - Soil
 L - Leachate
 WI - Wipe
 DW - Drinking Water
 O - Other

Client Comments: _____
 Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Dean Tiebrut
 Contact: Dean Tiebrut
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional) _____
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job # 500-151344

Chain of Custody Number: _____

Page 3 of 3

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Comments		
<u>ED1</u>		<u>945-021</u>						Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Lab Project #		# of Containers		Matrix		Comments		
<u>IOBT 176-001-43</u>										
Project Location/State		Lab Project #		Date		Time		Comments		
<u>Chicago IL</u>										
Sampler		Lab PM		Date		Time		Comments		
<u>A-Pacyga</u>		<u>Richard Wright</u>								
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total Metals	TCLP Metals
<u>22</u>		<u>2615V-118-D12(31-39)</u>	<u>9-12-18</u>	<u>1145</u>	<u>4</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>27</u>		<u>(39-47)</u>		<u>1155</u>						
<u>23</u>		<u>-B10(0-5)</u>		<u>1305</u>						
<u>24</u>		<u>(5-10)</u>		<u>1310</u>						
<u>25</u>		<u>(10-15)</u>		<u>1315</u>						
<u>26</u>		<u>(15-23)</u>		<u>1320</u>						
<u>27</u>		<u>(23-31)</u>		<u>1325</u>						
<u>28</u>		<u>(31-39)</u>		<u>1335</u>						
<u>29</u>		<u>(39-47)</u>		<u>1345</u>						
<u>30</u>		<u>(39-47)D</u>		<u>1345</u>						

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company <u>ED1</u>	Date <u>9-12-18</u>	Time <u>1445</u>	Received By <u>[Signature]</u>	Company <u>EA</u>	Date <u>9/12/18</u>	Time <u>1445</u>
Relinquished By <u>[Signature]</u>	Company <u>EA</u>	Date <u>9/12/18</u>	Time <u>1638</u>	Received By _____	Company _____	Date _____	Time _____
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____

Lab Courier: _____
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-151344-1

Login Number: 151344

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4,3.6,5.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-173940-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/9/2019 10:28:09 AM

Richard Wright, Senior Project Manager
(708)534-5200
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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Job ID: 500-173940-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173940-1

Receipt

The samples were received on 11/21/2019 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.8° C and 5.3° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Surrogate recovery for the following sample was outside control limits: 2615V2-01-B15 (0-5) (500-173940-1). Evidence of severe matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: Due to sample matrix effect on the internal standard's (ISTD's), a dilution was required for the following sample: 2615V2-01-B15 (0-5) (500-173940-1). The sample had an extremely large pair of unknown ketone peaks which made a lesser dilution unable to report.

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 518580 had 1 analyte outside control limits: Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-518580/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The laboratory control sample (LCS) for preparation batch 500-517877 and 500-518493 and analytical batch 500-518818 recovered outside control limits for the following analytes: Lead. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

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Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.018		0.017	0.0072	mg/Kg	1	☼		8260B	Total/NA
Trichloroethene	0.00073	J	0.0017	0.00056	mg/Kg	1	☼		8260B	Total/NA
Xylenes, Total	0.00060	J	0.0033	0.00053	mg/Kg	1	☼		8260B	Total/NA
2-Methylnaphthalene	0.059	J	0.077	0.0070	mg/Kg	1	☼		8270D	Total/NA
Acenaphthene	0.063		0.038	0.0069	mg/Kg	1	☼		8270D	Total/NA
Dibenzofuran	0.088	J	0.19	0.045	mg/Kg	1	☼		8270D	Total/NA
Phenanthrene	0.41		0.038	0.0053	mg/Kg	1	☼		8270D	Total/NA
Anthracene	0.081		0.038	0.0064	mg/Kg	1	☼		8270D	Total/NA
Fluoranthene	0.14		0.038	0.0071	mg/Kg	1	☼		8270D	Total/NA
Pyrene	0.14		0.038	0.0076	mg/Kg	1	☼		8270D	Total/NA
Chrysene	0.052		0.038	0.010	mg/Kg	1	☼		8270D	Total/NA
Antimony	0.37	J B	1.1	0.21	mg/Kg	1	☼		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (0-5) (Continued)

Lab Sample ID: 500-173940-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.7		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	15	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	49000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		28	9.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.80		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	980		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	74		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.059		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.11	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.72		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.047		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.00057	J	0.0019	0.00049	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.29		0.037	0.0057	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.10		0.074	0.0068	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.028	J	0.037	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.31		0.037	0.0066	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.26		0.18	0.043	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.21		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.92		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.22		0.037	0.0061	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.11	J	0.18	0.092	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.92		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.92		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.31		0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.36		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.32		0.037	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.22		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.27		0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (5-10) (Continued)

Lab Sample ID: 500-173940-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.069		0.037	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.087		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.68	J B	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	29		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	14	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	49000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	14	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.65		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	1000		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.98		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.50		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.058	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.074	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.68		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.018	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.046	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.70	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.3	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (10-15) (Continued)

Lab Sample ID: 500-173940-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.98		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.69		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.090	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.20	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.072	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.20		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.038	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.054		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.70	J B	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.2		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.57	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.69		0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	280		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.68		0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (15-20) (Continued)

Lab Sample ID: 500-173940-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.061	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.12		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.020	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.030	J	0.036	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.039		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.56		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.12		0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.74		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	1.0		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.38		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.44		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.54		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.33		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.42		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.17		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.058		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.17		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.72	J B	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.5		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	160		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.56		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	12	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	71000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	48		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	91		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	32000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	30		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		28	9.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	220		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	160		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B54 (0-4) (Continued)

Lab Sample ID: 500-173940-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.014		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.47		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.28	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.17		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.30		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.080		0.018	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.081		0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.24		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.058		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.088		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.031	J	0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.069		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.67	J B	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	11		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	19		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	43		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	51		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	270		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.6		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.059		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.19		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.12	J F1 B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.088		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173940-6	2615V2-01-B16 (0-5)	Solid	11/21/19 11:05	11/21/19 16:00	
500-173940-7	2615V2-01-B16 (5-10)	Solid	11/21/19 11:15	11/21/19 16:00	
500-173940-8	2615V2-01-B16 (10-15)	Solid	11/21/19 11:20	11/21/19 16:00	
500-173940-9	2615V2-01-B16 (15-20)	Solid	11/21/19 11:30	11/21/19 16:00	
500-173940-10	2615V2-01-B54 (0-4)	Solid	11/21/19 13:36	11/21/19 16:00	
500-173940-11	2615V2-01-B53 (0-6)	Solid	11/21/19 14:00	11/21/19 16:00	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Date Collected: 11/21/19 11:05

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Acetone	0.018		0.017	0.0072	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Trichloroethene	0.00073	J	0.0017	0.00056	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1
Xylenes, Total	0.00060	J	0.0033	0.00053	mg/Kg	☼	11/22/19 18:15	12/04/19 11:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/22/19 18:15	12/04/19 11:55	1
4-Bromofluorobenzene (Surr)	122		75 - 131	11/22/19 18:15	12/04/19 11:55	1
Dibromofluoromethane	88		75 - 126	11/22/19 18:15	12/04/19 11:55	1
Toluene-d8 (Surr)	101		75 - 124	11/22/19 18:15	12/04/19 11:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Date Collected: 11/21/19 11:05

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Hexachlorocyclopentadiene	<0.77	*	0.77	0.22	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2-Methylnaphthalene	0.059	J	0.077	0.0070	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Acenaphthene	0.063		0.038	0.0069	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Dibenzofuran	0.088	J	0.19	0.045	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Phenanthrene	0.41		0.038	0.0053	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Anthracene	0.081		0.038	0.0064	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Fluoranthene	0.14		0.038	0.0071	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Pyrene	0.14		0.038	0.0076	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Benzof[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Date Collected: 11/21/19 11:05

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 83.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.052		0.038	0.010	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/04/19 08:05	12/05/19 22:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	61		31 - 166				12/04/19 08:05	12/05/19 22:37	1
Phenol-d5	67		30 - 153				12/04/19 08:05	12/05/19 22:37	1
Nitrobenzene-d5	83		37 - 147				12/04/19 08:05	12/05/19 22:37	1
2-Fluorobiphenyl	70		43 - 145				12/04/19 08:05	12/05/19 22:37	1
2,4,6-Tribromophenol	44		31 - 143				12/04/19 08:05	12/05/19 22:37	1
Terphenyl-d14	89		42 - 157				12/04/19 08:05	12/05/19 22:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J B	1.1	0.21	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Arsenic	7.7		0.55	0.19	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Barium	38		0.55	0.063	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Beryllium	0.61		0.22	0.051	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Boron	15	B	2.8	0.26	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Cadmium	0.19	B	0.11	0.020	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Calcium	49000	B	110	19	mg/Kg	☼	12/03/19 17:54	12/05/19 12:09	10
Chromium	15	B	0.55	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Cobalt	15		0.28	0.072	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Copper	33		0.55	0.15	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Iron	18000		11	5.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Lead	17		0.28	0.13	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Magnesium	21000	B	5.5	2.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Manganese	290		0.55	0.080	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Nickel	39		0.55	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Potassium	2800		28	9.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Selenium	0.80		0.55	0.32	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Silver	2.0		0.28	0.071	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Sodium	980		55	8.1	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Thallium	1.2		0.55	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Vanadium	18		0.28	0.065	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1
Zinc	74		1.1	0.48	mg/Kg	☼	12/03/19 17:54	12/04/19 18:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 16:19	1
Boron	0.074	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Date Collected: 11/21/19 11:05

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 83.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 16:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:19	1
Cobalt	0.023	J	0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:19	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 16:19	1
Lead	<0.0075	*	0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 16:19	1
Manganese	1.8		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:19	1
Nickel	0.059		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 16:19	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:19	1
Zinc	0.11	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 16:19	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.72		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/05/19 00:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/05/19 00:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.020	0.0065	mg/Kg	☼	12/02/19 15:05	12/03/19 10:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			11/27/19 13:09	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,1-Dichloroethene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Acetone	<0.019		0.019	0.0084	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Benzene	0.00057	J	0.0019	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Bromoform	<0.0019		0.0019	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Ethylbenzene	<0.0019		0.0019	0.00093	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Vinyl chloride	<0.0019		0.0019	0.00086	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/22/19 18:15	12/03/19 16:34	1
4-Bromofluorobenzene (Surr)	116		75 - 131	11/22/19 18:15	12/03/19 16:34	1
Dibromofluoromethane	88		75 - 126	11/22/19 18:15	12/03/19 16:34	1
Toluene-d8 (Surr)	99		75 - 124	11/22/19 18:15	12/03/19 16:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Naphthalene	0.29		0.037	0.0057	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Hexachlorocyclopentadiene	<0.74 *		0.74	0.21	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2-Methylnaphthalene	0.10		0.074	0.0068	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Acenaphthylene	0.028 J		0.037	0.0048	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Acenaphthene	0.31		0.037	0.0066	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Dibenzofuran	0.26		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Fluorene	0.21		0.037	0.0052	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Phenanthrene	0.92		0.037	0.0051	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Anthracene	0.22		0.037	0.0061	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Carbazole	0.11 J		0.18	0.092	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Fluoranthene	0.92		0.037	0.0068	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Pyrene	0.92		0.037	0.0073	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Benzo[a]anthracene	0.31		0.037	0.0049	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.36		0.037	0.010	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Benzo[b]fluoranthene	0.32		0.037	0.0079	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Benzo[k]fluoranthene	0.22		0.037	0.011	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Benzo[a]pyrene	0.27		0.037	0.0071	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Indeno[1,2,3-cd]pyrene	0.069		0.037	0.0095	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Benzo[g,h,i]perylene	0.087		0.037	0.012	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/04/19 08:05	12/05/19 23:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		31 - 166				12/04/19 08:05	12/05/19 23:00	1
Phenol-d5	71		30 - 153				12/04/19 08:05	12/05/19 23:00	1
Nitrobenzene-d5	82		37 - 147				12/04/19 08:05	12/05/19 23:00	1
2-Fluorobiphenyl	75		43 - 145				12/04/19 08:05	12/05/19 23:00	1
2,4,6-Tribromophenol	66		31 - 143				12/04/19 08:05	12/05/19 23:00	1
Terphenyl-d14	102		42 - 157				12/04/19 08:05	12/05/19 23:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J B	1.1	0.21	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Arsenic	7.6		0.55	0.19	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Barium	29		0.55	0.063	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Beryllium	0.59		0.22	0.051	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Boron	14	B	2.8	0.26	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Cadmium	0.12	B	0.11	0.020	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Calcium	49000	B	110	19	mg/Kg	☼	12/03/19 17:54	12/05/19 12:13	10
Chromium	14	B	0.55	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Cobalt	14		0.28	0.072	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Copper	30		0.55	0.15	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Iron	16000		11	5.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Lead	19		0.28	0.13	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Magnesium	20000	B	5.5	2.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Manganese	270		0.55	0.080	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Nickel	36		0.55	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Potassium	2600		28	9.8	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Selenium	0.65		0.55	0.32	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Silver	1.9		0.28	0.071	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Sodium	1000		55	8.2	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Thallium	0.98		0.55	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Vanadium	17		0.28	0.065	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1
Zinc	57		1.1	0.48	mg/Kg	☼	12/03/19 17:54	12/04/19 18:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 16:23	1
Boron	0.058	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 16:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:23	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:23	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 16:23	1
Lead	<0.0075	*	0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 16:23	1
Manganese	1.7		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:23	1
Nickel	0.031		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:23	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 16:23	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:23	1
Zinc	0.074	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 16:23	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.68		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:19	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/05/19 00:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/05/19 00:05	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0060	mg/Kg	☼	12/02/19 15:05	12/03/19 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.2	0.2	SU			11/27/19 13:12	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Acetone	0.012	J	0.018	0.0076	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/22/19 18:15	12/03/19 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/22/19 18:15	12/03/19 17:00	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/22/19 18:15	12/03/19 17:00	1
Dibromofluoromethane	92		75 - 126	11/22/19 18:15	12/03/19 17:00	1
Toluene-d8 (Surr)	95		75 - 124	11/22/19 18:15	12/03/19 17:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,4-Dichlorophenol	<0.40		0.40	0.094	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Hexachlorocyclopentadiene	<0.80	*	0.80	0.23	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2-Methylnaphthalene	0.046	J	0.080	0.0073	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Acenaphthene	<0.040		0.040	0.0071	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Phenanthrene	0.13		0.040	0.0055	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Anthracene	<0.040		0.040	0.0066	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Benzof[anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/04/19 08:05	12/05/19 23:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166				12/04/19 08:05	12/05/19 23:23	1
Phenol-d5	73		30 - 153				12/04/19 08:05	12/05/19 23:23	1
Nitrobenzene-d5	85		37 - 147				12/04/19 08:05	12/05/19 23:23	1
2-Fluorobiphenyl	75		43 - 145				12/04/19 08:05	12/05/19 23:23	1
2,4,6-Tribromophenol	55		31 - 143				12/04/19 08:05	12/05/19 23:23	1
Terphenyl-d14	100		42 - 157				12/04/19 08:05	12/05/19 23:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J B	1.2	0.23	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Arsenic	8.0		0.60	0.21	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Barium	42		0.60	0.069	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Beryllium	0.65		0.24	0.056	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Boron	18	B	3.0	0.28	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Cadmium	0.13	B	0.12	0.022	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Calcium	55000	B	120	20	mg/Kg	☼	12/03/19 17:54	12/05/19 12:17	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Cobalt	15		0.30	0.079	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Copper	27		0.60	0.17	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Iron	19000		12	6.3	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Lead	15		0.30	0.14	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Magnesium	23000	B	6.0	3.0	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Manganese	310		0.60	0.087	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Nickel	39		0.60	0.17	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Potassium	3100		30	11	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Selenium	0.98		0.60	0.35	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Silver	2.2		0.30	0.078	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Sodium	640		60	8.9	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Thallium	1.0		0.60	0.30	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1
Zinc	59		1.2	0.53	mg/Kg	☼	12/03/19 17:54	12/04/19 18:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.69		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 16:28	1
Boron	0.090	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 16:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:28	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:28	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 16:28	1
Lead	<0.0075	*	0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 16:28	1
Manganese	1.8		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:28	1
Nickel	0.038		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 16:28	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:28	1
Zinc	0.20	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 16:28	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.20		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:23	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/05/19 00:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/05/19 00:09	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0063	mg/Kg	☼	12/02/19 15:05	12/03/19 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			11/27/19 13:14	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Date Collected: 11/21/19 11:30

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/22/19 18:15	12/03/19 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/22/19 18:15	12/03/19 17:26	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/22/19 18:15	12/03/19 17:26	1
Dibromofluoromethane	89		75 - 126	11/22/19 18:15	12/03/19 17:26	1
Toluene-d8 (Surr)	97		75 - 124	11/22/19 18:15	12/03/19 17:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Date Collected: 11/21/19 11:30

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Hexachlorocyclopentadiene	<0.79	*	0.79	0.23	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2-Methylnaphthalene	0.072	J	0.079	0.0072	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Phenanthrene	0.20		0.039	0.0055	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Fluoranthene	0.038	J	0.039	0.0073	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Pyrene	0.054		0.039	0.0078	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Date Collected: 11/21/19 11:30

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/04/19 08:05	12/05/19 23:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	71		31 - 166				12/04/19 08:05	12/05/19 23:45	1
Phenol-d5	76		30 - 153				12/04/19 08:05	12/05/19 23:45	1
Nitrobenzene-d5	91		37 - 147				12/04/19 08:05	12/05/19 23:45	1
2-Fluorobiphenyl	78		43 - 145				12/04/19 08:05	12/05/19 23:45	1
2,4,6-Tribromophenol	58		31 - 143				12/04/19 08:05	12/05/19 23:45	1
Terphenyl-d14	109		42 - 157				12/04/19 08:05	12/05/19 23:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J B	1.1	0.22	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Arsenic	7.2		0.57	0.19	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Barium	41		0.57	0.065	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Beryllium	0.66		0.23	0.053	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Boron	18	B	2.8	0.26	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Cadmium	0.10	J B	0.11	0.020	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Calcium	58000	B	110	19	mg/Kg	☼	12/03/19 17:54	12/05/19 12:21	10
Chromium	17	B	0.57	0.28	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Cobalt	14		0.28	0.074	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Copper	27		0.57	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Iron	19000		11	5.9	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Lead	14		0.28	0.13	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Magnesium	23000	B	5.7	2.8	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Manganese	300		0.57	0.082	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Nickel	38		0.57	0.17	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Potassium	3100		28	10	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Selenium	0.69		0.57	0.33	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Silver	2.2		0.28	0.073	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Sodium	280		57	8.4	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Thallium	1.0		0.57	0.28	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Vanadium	20		0.28	0.067	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1
Zinc	60		1.1	0.50	mg/Kg	☼	12/03/19 17:54	12/04/19 18:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 16:32	1
Boron	0.099	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Date Collected: 11/21/19 11:30

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 16:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:32	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:32	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 16:32	1
Lead	<0.0075	*	0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 16:32	1
Manganese	1.8		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:32	1
Nickel	0.035		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 16:32	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:32	1
Zinc	0.061	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 16:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.12		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:27	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/05/19 00:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/05/19 00:13	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.020	0.0067	mg/Kg	☼	12/02/19 15:05	12/03/19 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			11/27/19 13:17	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 90.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00082	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00078	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,1-Dichloroethane	<0.0024		0.0024	0.00083	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,1-Dichloroethene	<0.0024		0.0024	0.00084	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,2-Dichloroethane	<0.0061		0.0061	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,2-Dichloropropane	<0.0024		0.0024	0.00063	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00086	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
2-Butanone (MEK)	<0.0061		0.0061	0.0027	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
2-Hexanone	<0.0061		0.0061	0.0019	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
4-Methyl-2-pentanone (MIBK)	<0.0061		0.0061	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Acetone	<0.024		0.024	0.011	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Benzene	<0.0024		0.0024	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Bromodichloromethane	<0.0024		0.0024	0.00050	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Bromoform	<0.0024		0.0024	0.00071	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Bromomethane	<0.0061		0.0061	0.0023	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Carbon disulfide	<0.0061		0.0061	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Carbon tetrachloride	<0.0024		0.0024	0.00071	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Chlorobenzene	<0.0024		0.0024	0.00090	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Chloroethane	<0.0061		0.0061	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Chloroform	<0.0024		0.0024	0.00085	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Chloromethane	<0.0061		0.0061	0.0024	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00068	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00073	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Dibromochloromethane	<0.0024		0.0024	0.00080	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Ethylbenzene	<0.0024		0.0024	0.0012	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00072	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Methylene Chloride	<0.0061		0.0061	0.0024	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Styrene	<0.0024		0.0024	0.00074	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Tetrachloroethene	<0.0024		0.0024	0.00083	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Toluene	<0.0024		0.0024	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00086	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Trichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Vinyl acetate	<0.0061		0.0061	0.0021	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1
Xylenes, Total	<0.0049		0.0049	0.00078	mg/Kg	☼	11/22/19 18:15	12/03/19 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/22/19 18:15	12/03/19 17:51	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/22/19 18:15	12/03/19 17:51	1
Dibromofluoromethane	88		75 - 126	11/22/19 18:15	12/03/19 17:51	1
Toluene-d8 (Surr)	95		75 - 124	11/22/19 18:15	12/03/19 17:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 90.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Hexachlorocyclopentadiene	<0.74 *		0.74	0.21	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Acenaphthylene	0.020	J	0.036	0.0048	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Acenaphthene	0.030	J	0.036	0.0066	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Fluorene	0.039		0.036	0.0051	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Phenanthrene	0.56		0.036	0.0051	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Anthracene	0.12		0.036	0.0061	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Fluoranthene	0.74		0.036	0.0068	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Pyrene	1.0		0.036	0.0073	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Benzo[a]anthracene	0.38		0.036	0.0049	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 90.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.44		0.036	0.010	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Benzo[b]fluoranthene	0.54		0.036	0.0079	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Benzo[k]fluoranthene	0.33		0.036	0.011	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Benzo[a]pyrene	0.42		0.036	0.0071	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Indeno[1,2,3-cd]pyrene	0.17		0.036	0.0095	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Dibenz(a,h)anthracene	0.058		0.036	0.0071	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Benzo[g,h,i]perylene	0.17		0.036	0.012	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	12/04/19 08:05	12/06/19 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				12/04/19 08:05	12/06/19 00:08	1
Phenol-d5	71		30 - 153				12/04/19 08:05	12/06/19 00:08	1
Nitrobenzene-d5	91		37 - 147				12/04/19 08:05	12/06/19 00:08	1
2-Fluorobiphenyl	82		43 - 145				12/04/19 08:05	12/06/19 00:08	1
2,4,6-Tribromophenol	83		31 - 143				12/04/19 08:05	12/06/19 00:08	1
Terphenyl-d14	114		42 - 157				12/04/19 08:05	12/06/19 00:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J B	1.1	0.21	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Arsenic	6.5		0.55	0.19	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Barium	160		0.55	0.063	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Beryllium	0.56		0.22	0.051	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Boron	12	B	2.8	0.26	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Cadmium	0.35	B	0.11	0.020	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Calcium	71000	B	110	19	mg/Kg	☼	12/03/19 17:54	12/05/19 12:25	10
Chromium	15	B	0.55	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Cobalt	11		0.28	0.072	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Copper	48		0.55	0.15	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Iron	15000		11	5.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Lead	91		0.28	0.13	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Magnesium	32000	B	5.5	2.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Manganese	280		0.55	0.080	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Nickel	30		0.55	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Potassium	2200		28	9.7	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Selenium	0.83		0.55	0.32	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Silver	1.9		0.28	0.071	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Sodium	220		55	8.2	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Thallium	0.71		0.55	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Vanadium	17		0.28	0.065	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1
Zinc	160		1.1	0.48	mg/Kg	☼	12/03/19 17:54	12/04/19 18:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 16:37	1
Boron	0.074	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 90.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0025	J	0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 16:37	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:37	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:37	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 16:37	1
Lead	0.014		0.0075	0.0075	mg/L		12/05/19 15:46	12/06/19 10:25	1
Manganese	0.47		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:37	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:37	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 16:37	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:37	1
Zinc	0.28	J B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 16:37	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.17		0.0075	0.0075	mg/L		12/03/19 15:50	12/04/19 22:31	1
Manganese	0.30		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:31	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/05/19 00:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/05/19 00:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080		0.018	0.0058	mg/Kg	☼	12/02/19 15:05	12/03/19 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			11/27/19 13:19	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Date Collected: 11/21/19 14:00

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/22/19 18:15	12/03/19 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/22/19 18:15	12/03/19 18:17	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/22/19 18:15	12/03/19 18:17	1
Dibromofluoromethane	91		75 - 126	11/22/19 18:15	12/03/19 18:17	1
Toluene-d8 (Surr)	97		75 - 124	11/22/19 18:15	12/03/19 18:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Date Collected: 11/21/19 14:00

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Hexachlorocyclopentadiene	<0.78	*	0.78	0.22	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2-Methylnaphthalene	0.081		0.078	0.0071	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Phenanthrene	0.24		0.038	0.0054	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Fluoranthene	0.058		0.038	0.0072	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Pyrene	0.088		0.038	0.0077	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Benzo[a]anthracene	0.031	J	0.038	0.0052	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Date Collected: 11/21/19 14:00

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.069		0.038	0.011	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/04/19 08:05	12/06/19 00:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				12/04/19 08:05	12/06/19 00:31	1
Phenol-d5	73		30 - 153				12/04/19 08:05	12/06/19 00:31	1
Nitrobenzene-d5	86		37 - 147				12/04/19 08:05	12/06/19 00:31	1
2-Fluorobiphenyl	73		43 - 145				12/04/19 08:05	12/06/19 00:31	1
2,4,6-Tribromophenol	64		31 - 143				12/04/19 08:05	12/06/19 00:31	1
Terphenyl-d14	108		42 - 157				12/04/19 08:05	12/06/19 00:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.67	J B	1.2	0.23	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Arsenic	11		0.58	0.20	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Barium	32		0.58	0.066	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Beryllium	0.67		0.23	0.054	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Boron	17	B	2.9	0.27	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Cadmium	0.12	B	0.12	0.021	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Calcium	28000	B	12	2.0	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Chromium	16	B	0.58	0.29	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Cobalt	19		0.29	0.076	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Copper	43		0.58	0.16	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Iron	21000		12	6.1	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Lead	21		0.29	0.13	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Magnesium	17000	B	5.8	2.9	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Manganese	280		0.58	0.084	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Nickel	51		0.58	0.17	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Potassium	3100		29	10	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Selenium	0.68		0.58	0.34	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Silver	1.9		0.29	0.075	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Sodium	270		58	8.6	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Thallium	1.6		0.58	0.29	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1
Zinc	53		1.2	0.51	mg/Kg	☼	12/03/19 17:54	12/04/19 18:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.13	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 16:50	1
Boron	0.087	J	0.50	0.050	mg/L		12/03/19 15:52	12/04/19 16:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Date Collected: 11/21/19 14:00

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 16:50	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:50	1
Cobalt	0.059		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:50	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 16:50	1
Lead	<0.0075 *		0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 16:50	1
Manganese	2.3		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:50	1
Nickel	0.19		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:50	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 16:50	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 16:50	1
Zinc	0.12	J F1 B	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 16:50	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.088		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:35	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 22:35	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/05/19 00:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/05/19 00:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 08:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0059	mg/Kg	☼	12/02/19 15:05	12/03/19 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3		0.2	0.2	SU			11/27/19 13:24	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

GC/MS VOA

Prep Batch: 518046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	5035	
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	5035	
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	5035	
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	5035	
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	5035	
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	5035	
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	5035	
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	5035	
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	5035	
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	5035	
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	5035	

Analysis Batch: 518336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	8260B	518046
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	8260B	518046
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	8260B	518046
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	8260B	518046
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	8260B	518046
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	8260B	518046
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	8260B	518046
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	8260B	518046
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	8260B	518046
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	8260B	518046
MB 500-518336/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-518336/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-518336/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 518572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	8260B	518046
MB 500-518572/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-518572/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 518580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	3541	
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	3541	
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	3541	
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	3541	
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	3541	
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	3541	
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	3541	
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	3541	
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	3541	
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	3541	
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	3541	
MB 500-518580/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-518580/2-A	Lab Control Sample	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

GC/MS Semi VOA

Analysis Batch: 518752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-518580/2-A	Lab Control Sample	Total/NA	Solid	8270D	518580

Analysis Batch: 518922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	8270D	518580
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	8270D	518580
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	8270D	518580
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	8270D	518580
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	8270D	518580
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	8270D	518580
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	8270D	518580
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	8270D	518580
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	8270D	518580
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	8270D	518580
MB 500-518580/1-A	Method Blank	Total/NA	Solid	8270D	518580

Analysis Batch: 519122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	8270D	518580

Metals

Leach Batch: 517874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-2	2615V2-01-B15 (5-10)	SPLP East	Solid	1312	
500-173940-3	2615V2-01-B15 (10-15)	SPLP East	Solid	1312	
500-173940-4	2615V2-01-B15 (10-15)D	SPLP East	Solid	1312	
500-173940-5	2615V2-01-B15 (15-20)	SPLP East	Solid	1312	
500-173940-6	2615V2-01-B16 (0-5)	SPLP East	Solid	1312	
500-173940-7	2615V2-01-B16 (5-10)	SPLP East	Solid	1312	
500-173940-8	2615V2-01-B16 (10-15)	SPLP East	Solid	1312	
500-173940-9	2615V2-01-B16 (15-20)	SPLP East	Solid	1312	
500-173940-10	2615V2-01-B54 (0-4)	SPLP East	Solid	1312	
500-173940-11	2615V2-01-B53 (0-6)	SPLP East	Solid	1312	
LB 500-517874/1-B	Method Blank	SPLP East	Solid	1312	

Leach Batch: 517877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	TCLP	Solid	1311	
500-173940-2	2615V2-01-B15 (5-10)	TCLP	Solid	1311	
500-173940-3	2615V2-01-B15 (10-15)	TCLP	Solid	1311	
500-173940-4	2615V2-01-B15 (10-15)D	TCLP	Solid	1311	
500-173940-5	2615V2-01-B15 (15-20)	TCLP	Solid	1311	
500-173940-6	2615V2-01-B16 (0-5)	TCLP	Solid	1311	
500-173940-7	2615V2-01-B16 (5-10)	TCLP	Solid	1311	
500-173940-8	2615V2-01-B16 (10-15)	TCLP	Solid	1311	
500-173940-9	2615V2-01-B16 (15-20)	TCLP	Solid	1311	
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	1311	
500-173940-11	2615V2-01-B53 (0-6)	TCLP	Solid	1311	
LB 500-517877/1-B	Method Blank	TCLP	Solid	1311	
LB 500-517877/1-C	Method Blank	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Metals (Continued)

Leach Batch: 517877 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-517877/1-D	Method Blank	TCLP	Solid	1311	
500-173940-6 MS	2615V2-01-B16 (0-5)	TCLP	Solid	1311	
500-173940-6 MSD	2615V2-01-B16 (0-5)	TCLP	Solid	1311	
500-173940-11 MS	2615V2-01-B53 (0-6)	TCLP	Solid	1311	
500-173940-6 DU	2615V2-01-B16 (0-5)	TCLP	Solid	1311	
500-173940-11 DU	2615V2-01-B53 (0-6)	TCLP	Solid	1311	

Prep Batch: 518206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	7471B	
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	7471B	
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	7471B	
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	7471B	
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	7471B	
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	7471B	
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	7471B	
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	7471B	
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	7471B	
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	7471B	
MB 500-518206/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-518206/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-173940-8 MS	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	
500-173940-8 MSD	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	
500-173940-8 DU	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	

Prep Batch: 518400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	TCLP	Solid	7470A	517877
500-173940-2	2615V2-01-B15 (5-10)	TCLP	Solid	7470A	517877
500-173940-3	2615V2-01-B15 (10-15)	TCLP	Solid	7470A	517877
500-173940-4	2615V2-01-B15 (10-15)D	TCLP	Solid	7470A	517877
500-173940-5	2615V2-01-B15 (15-20)	TCLP	Solid	7470A	517877
500-173940-6	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	517877
500-173940-7	2615V2-01-B16 (5-10)	TCLP	Solid	7470A	517877
500-173940-8	2615V2-01-B16 (10-15)	TCLP	Solid	7470A	517877
500-173940-9	2615V2-01-B16 (15-20)	TCLP	Solid	7470A	517877
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	7470A	517877
500-173940-11	2615V2-01-B53 (0-6)	TCLP	Solid	7470A	517877
LB 500-517877/1-B	Method Blank	TCLP	Solid	7470A	517877
MB 500-518400/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-518400/13-A	Lab Control Sample	Total/NA	Solid	7470A	
LCSD 500-518400/37-A	Lab Control Sample Dup	Total/NA	Solid	7470A	
500-173940-6 MS	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	517877
500-173940-6 MSD	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	517877
500-173940-6 DU	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	517877

Analysis Batch: 518416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	7471B	518206
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	7471B	518206

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Metals (Continued)

Analysis Batch: 518416 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	7471B	518206
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	7471B	518206
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	7471B	518206
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	7471B	518206
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	7471B	518206
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	518206
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	7471B	518206
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	7471B	518206
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	7471B	518206
MB 500-518206/12-A	Method Blank	Total/NA	Solid	7471B	518206
LCS 500-518206/13-A	Lab Control Sample	Total/NA	Solid	7471B	518206
500-173940-8 MS	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	518206
500-173940-8 MSD	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	518206
500-173940-8 DU	2615V2-01-B16 (10-15)	Total/NA	Solid	7471B	518206

Prep Batch: 518491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-2	2615V2-01-B15 (5-10)	SPLP East	Solid	3010A	517874
500-173940-3	2615V2-01-B15 (10-15)	SPLP East	Solid	3010A	517874
500-173940-4	2615V2-01-B15 (10-15)D	SPLP East	Solid	3010A	517874
500-173940-5	2615V2-01-B15 (15-20)	SPLP East	Solid	3010A	517874
500-173940-6	2615V2-01-B16 (0-5)	SPLP East	Solid	3010A	517874
500-173940-7	2615V2-01-B16 (5-10)	SPLP East	Solid	3010A	517874
500-173940-8	2615V2-01-B16 (10-15)	SPLP East	Solid	3010A	517874
500-173940-9	2615V2-01-B16 (15-20)	SPLP East	Solid	3010A	517874
500-173940-10	2615V2-01-B54 (0-4)	SPLP East	Solid	3010A	517874
500-173940-11	2615V2-01-B53 (0-6)	SPLP East	Solid	3010A	517874
LB 500-517874/1-B	Method Blank	SPLP East	Solid	3010A	517874
LCS 500-518491/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 518493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	TCLP	Solid	3010A	517877
500-173940-2	2615V2-01-B15 (5-10)	TCLP	Solid	3010A	517877
500-173940-3	2615V2-01-B15 (10-15)	TCLP	Solid	3010A	517877
500-173940-4	2615V2-01-B15 (10-15)D	TCLP	Solid	3010A	517877
500-173940-5	2615V2-01-B15 (15-20)	TCLP	Solid	3010A	517877
500-173940-6	2615V2-01-B16 (0-5)	TCLP	Solid	3010A	517877
500-173940-7	2615V2-01-B16 (5-10)	TCLP	Solid	3010A	517877
500-173940-8	2615V2-01-B16 (10-15)	TCLP	Solid	3010A	517877
500-173940-9	2615V2-01-B16 (15-20)	TCLP	Solid	3010A	517877
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	3010A	517877
500-173940-11	2615V2-01-B53 (0-6)	TCLP	Solid	3010A	517877
LB 500-517877/1-C	Method Blank	TCLP	Solid	3010A	517877
LCS 500-518493/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-173940-11 MS	2615V2-01-B53 (0-6)	TCLP	Solid	3010A	517877
500-173940-11 DU	2615V2-01-B53 (0-6)	TCLP	Solid	3010A	517877

Prep Batch: 518510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Metals (Continued)

Prep Batch: 518510 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	3050B	
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	3050B	
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	3050B	
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	3050B	
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	3050B	
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	3050B	
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	3050B	
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	3050B	
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	3050B	
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	3050B	
MB 500-518510/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518510/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 518657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	TCLP	Solid	7470A	518400
500-173940-2	2615V2-01-B15 (5-10)	TCLP	Solid	7470A	518400
500-173940-3	2615V2-01-B15 (10-15)	TCLP	Solid	7470A	518400
500-173940-4	2615V2-01-B15 (10-15)D	TCLP	Solid	7470A	518400
500-173940-5	2615V2-01-B15 (15-20)	TCLP	Solid	7470A	518400
500-173940-6	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	518400
500-173940-7	2615V2-01-B16 (5-10)	TCLP	Solid	7470A	518400
500-173940-8	2615V2-01-B16 (10-15)	TCLP	Solid	7470A	518400
500-173940-9	2615V2-01-B16 (15-20)	TCLP	Solid	7470A	518400
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	7470A	518400
500-173940-11	2615V2-01-B53 (0-6)	TCLP	Solid	7470A	518400
LB 500-517877/1-B	Method Blank	TCLP	Solid	7470A	518400
MB 500-518400/12-A	Method Blank	Total/NA	Solid	7470A	518400
LCS 500-518400/13-A	Lab Control Sample	Total/NA	Solid	7470A	518400
LCS 500-518400/37-A	Lab Control Sample Dup	Total/NA	Solid	7470A	518400
500-173940-6 MS	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	518400
500-173940-6 MSD	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	518400
500-173940-6 DU	2615V2-01-B16 (0-5)	TCLP	Solid	7470A	518400

Analysis Batch: 518808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	6010B	518510
500-173940-2	2615V2-01-B15 (5-10)	SPLP East	Solid	6010B	518491
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	6010B	518510
500-173940-3	2615V2-01-B15 (10-15)	SPLP East	Solid	6010B	518491
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	6010B	518510
500-173940-4	2615V2-01-B15 (10-15)D	SPLP East	Solid	6010B	518491
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	6010B	518510
500-173940-5	2615V2-01-B15 (15-20)	SPLP East	Solid	6010B	518491
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	6010B	518510
500-173940-6	2615V2-01-B16 (0-5)	SPLP East	Solid	6010B	518491
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	6010B	518510
500-173940-7	2615V2-01-B16 (5-10)	SPLP East	Solid	6010B	518491
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	6010B	518510
500-173940-8	2615V2-01-B16 (10-15)	SPLP East	Solid	6010B	518491
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	6010B	518510

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Metals (Continued)

Analysis Batch: 518808 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-9	2615V2-01-B16 (15-20)	SPLP East	Solid	6010B	518491
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	6010B	518510
500-173940-10	2615V2-01-B54 (0-4)	SPLP East	Solid	6010B	518491
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	6010B	518510
500-173940-11	2615V2-01-B53 (0-6)	SPLP East	Solid	6010B	518491
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	6010B	518510
LB 500-517874/1-B	Method Blank	SPLP East	Solid	6010B	518491
MB 500-518510/1-A	Method Blank	Total/NA	Solid	6010B	518510
LCS 500-518491/2-A	Lab Control Sample	Total/NA	Solid	6010B	518491
LCS 500-518510/2-A	Lab Control Sample	Total/NA	Solid	6010B	518510

Analysis Batch: 518818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	TCLP	Solid	6010B	518493
500-173940-2	2615V2-01-B15 (5-10)	TCLP	Solid	6010B	518493
500-173940-3	2615V2-01-B15 (10-15)	TCLP	Solid	6010B	518493
500-173940-4	2615V2-01-B15 (10-15)D	TCLP	Solid	6010B	518493
500-173940-5	2615V2-01-B15 (15-20)	TCLP	Solid	6010B	518493
500-173940-6	2615V2-01-B16 (0-5)	TCLP	Solid	6010B	518493
500-173940-7	2615V2-01-B16 (5-10)	TCLP	Solid	6010B	518493
500-173940-8	2615V2-01-B16 (10-15)	TCLP	Solid	6010B	518493
500-173940-9	2615V2-01-B16 (15-20)	TCLP	Solid	6010B	518493
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	6010B	518493
500-173940-11	2615V2-01-B53 (0-6)	TCLP	Solid	6010B	518493
LB 500-517877/1-C	Method Blank	TCLP	Solid	6010B	518493
LCS 500-518493/2-A	Lab Control Sample	Total/NA	Solid	6010B	518493
500-173940-11 MS	2615V2-01-B53 (0-6)	TCLP	Solid	6010B	518493
500-173940-11 DU	2615V2-01-B53 (0-6)	TCLP	Solid	6010B	518493

Analysis Batch: 518854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	TCLP	Solid	6020A	518493
500-173940-2	2615V2-01-B15 (5-10)	TCLP	Solid	6020A	518493
500-173940-3	2615V2-01-B15 (10-15)	TCLP	Solid	6020A	518493
500-173940-4	2615V2-01-B15 (10-15)D	TCLP	Solid	6020A	518493
500-173940-5	2615V2-01-B15 (15-20)	TCLP	Solid	6020A	518493
500-173940-6	2615V2-01-B16 (0-5)	TCLP	Solid	6020A	518493
500-173940-7	2615V2-01-B16 (5-10)	TCLP	Solid	6020A	518493
500-173940-8	2615V2-01-B16 (10-15)	TCLP	Solid	6020A	518493
500-173940-9	2615V2-01-B16 (15-20)	TCLP	Solid	6020A	518493
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	6020A	518493
500-173940-11	2615V2-01-B53 (0-6)	TCLP	Solid	6020A	518493
LB 500-517877/1-C	Method Blank	TCLP	Solid	6020A	518493
LCS 500-518493/2-A	Lab Control Sample	Total/NA	Solid	6020A	518493
500-173940-11 MS	2615V2-01-B53 (0-6)	TCLP	Solid	6020A	518493
500-173940-11 DU	2615V2-01-B53 (0-6)	TCLP	Solid	6020A	518493

Analysis Batch: 518947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	6010B	518510
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	6010B	518510

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Metals (Continued)

Analysis Batch: 518947 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	6010B	518510
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	6010B	518510
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	6010B	518510
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	6010B	518510
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	6010B	518510
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	6010B	518510
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	6010B	518510
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	6010B	518510

Prep Batch: 518998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	3010A	517877
LB 500-517877/1-D	Method Blank	TCLP	Solid	3010A	517877
LCS 500-518998/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 519201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-10	2615V2-01-B54 (0-4)	TCLP	Solid	6010B	518998
LB 500-517877/1-D	Method Blank	TCLP	Solid	6010B	518998
LCS 500-518998/2-A	Lab Control Sample	Total/NA	Solid	6010B	518998

General Chemistry

Analysis Batch: 517553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	9045D	
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	9045D	
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	9045D	
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	9045D	
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	9045D	
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	9045D	
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	9045D	
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	9045D	
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	9045D	
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	9045D	
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	9045D	
LCS 500-517553/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-517553/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-173940-2 DU	2615V2-01-B15 (5-10)	Total/NA	Solid	9045D	

Analysis Batch: 517591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-1	2615V2-01-B15 (0-5)	Total/NA	Solid	Moisture	
500-173940-2	2615V2-01-B15 (5-10)	Total/NA	Solid	Moisture	
500-173940-3	2615V2-01-B15 (10-15)	Total/NA	Solid	Moisture	
500-173940-4	2615V2-01-B15 (10-15)D	Total/NA	Solid	Moisture	
500-173940-5	2615V2-01-B15 (15-20)	Total/NA	Solid	Moisture	
500-173940-6	2615V2-01-B16 (0-5)	Total/NA	Solid	Moisture	
500-173940-7	2615V2-01-B16 (5-10)	Total/NA	Solid	Moisture	
500-173940-8	2615V2-01-B16 (10-15)	Total/NA	Solid	Moisture	
500-173940-9	2615V2-01-B16 (15-20)	Total/NA	Solid	Moisture	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

General Chemistry (Continued)

Analysis Batch: 517591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173940-10	2615V2-01-B54 (0-4)	Total/NA	Solid	Moisture	
500-173940-11	2615V2-01-B53 (0-6)	Total/NA	Solid	Moisture	
500-173940-10 DU	2615V2-01-B54 (0-4)	Total/NA	Solid	Moisture	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-173940-1	2615V2-01-B15 (0-5)	89	97	85	93
500-173940-2	2615V2-01-B15 (5-10)	95	101	92	95
500-173940-3	2615V2-01-B15 (10-15)	95	101	91	97
500-173940-4	2615V2-01-B15 (10-15)D	94	100	88	96
500-173940-5	2615V2-01-B15 (15-20)	92	102	89	96
500-173940-6	2615V2-01-B16 (0-5)	94	122	88	101
500-173940-7	2615V2-01-B16 (5-10)	92	116	88	99
500-173940-8	2615V2-01-B16 (10-15)	95	101	92	95
500-173940-9	2615V2-01-B16 (15-20)	94	103	89	97
500-173940-10	2615V2-01-B54 (0-4)	94	104	88	95
500-173940-11	2615V2-01-B53 (0-6)	95	103	91	97
LCS 500-518336/4	Lab Control Sample	86	93	89	97
LCS 500-518572/4	Lab Control Sample	87	95	87	96
LCS 500-518336/5	Lab Control Sample Dup	89	93	88	96
MB 500-518336/7	Method Blank	90	100	87	94
MB 500-518572/7	Method Blank	90	100	86	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-173940-1	2615V2-01-B15 (0-5)	31	59	102	81	1 X	86
500-173940-2	2615V2-01-B15 (5-10)	53	57	71	59	51	82
500-173940-3	2615V2-01-B15 (10-15)	60	60	73	67	54	82
500-173940-4	2615V2-01-B15 (10-15)D	63	64	83	73	68	97
500-173940-5	2615V2-01-B15 (15-20)	53	61	68	60	40	74
500-173940-6	2615V2-01-B16 (0-5)	61	67	83	70	44	89
500-173940-7	2615V2-01-B16 (5-10)	66	71	82	75	66	102
500-173940-8	2615V2-01-B16 (10-15)	65	73	85	75	55	100
500-173940-9	2615V2-01-B16 (15-20)	71	76	91	78	58	109
500-173940-10	2615V2-01-B54 (0-4)	70	71	91	82	83	114
500-173940-11	2615V2-01-B53 (0-6)	67	73	86	73	64	108
LCS 500-518580/2-A	Lab Control Sample	96	82	89	95	91	80
MB 500-518580/1-A	Method Blank	84	83	113	101	76	103

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518336/7
Matrix: Solid
Analysis Batch: 518336

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/03/19 11:27	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/03/19 11:27	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/03/19 11:27	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/03/19 11:27	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/03/19 11:27	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/03/19 11:27	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/03/19 11:27	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/03/19 11:27	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/03/19 11:27	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/03/19 11:27	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/03/19 11:27	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/03/19 11:27	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/03/19 11:27	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/03/19 11:27	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/03/19 11:27	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/03/19 11:27	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/03/19 11:27	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/03/19 11:27	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/03/19 11:27	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/03/19 11:27	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/03/19 11:27	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/03/19 11:27	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/03/19 11:27	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/03/19 11:27	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/03/19 11:27	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/03/19 11:27	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/03/19 11:27	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/03/19 11:27	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/03/19 11:27	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/03/19 11:27	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/03/19 11:27	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/03/19 11:27	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/03/19 11:27	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/03/19 11:27	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/03/19 11:27	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/03/19 11:27	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/03/19 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/03/19 11:27	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/03/19 11:27	1
Dibromofluoromethane	87		75 - 126		12/03/19 11:27	1
Toluene-d8 (Surr)	94		75 - 124		12/03/19 11:27	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518336/4

Matrix: Solid

Analysis Batch: 518336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0472		mg/Kg		94	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0411		mg/Kg		82	70 - 122
1,1,2-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 125
1,1-Dichloroethane	0.0500	0.0457		mg/Kg		91	70 - 125
1,1-Dichloroethene	0.0500	0.0476		mg/Kg		95	70 - 120
1,2-Dichloroethane	0.0500	0.0442		mg/Kg		88	70 - 130
1,2-Dichloropropane	0.0500	0.0438		mg/Kg		88	70 - 125
2-Butanone (MEK)	0.0500	0.0413		mg/Kg		83	47 - 138
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0403		mg/Kg		81	50 - 148
Acetone	0.0500	0.0472		mg/Kg		94	40 - 150
Benzene	0.0500	0.0462		mg/Kg		92	70 - 125
Bromodichloromethane	0.0500	0.0428		mg/Kg		86	67 - 129
Bromoform	0.0500	0.0383		mg/Kg		77	68 - 136
Bromomethane	0.0500	0.0449		mg/Kg		90	70 - 130
Carbon disulfide	0.0500	0.0455		mg/Kg		91	70 - 129
Carbon tetrachloride	0.0500	0.0475		mg/Kg		95	75 - 125
Chlorobenzene	0.0500	0.0476		mg/Kg		95	50 - 150
Chloroethane	0.0500	0.0465		mg/Kg		93	75 - 125
Chloroform	0.0500	0.0459		mg/Kg		92	57 - 135
Chloromethane	0.0500	0.0422		mg/Kg		84	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0465		mg/Kg		93	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0444		mg/Kg		89	70 - 125
Dibromochloromethane	0.0500	0.0409		mg/Kg		82	69 - 125
Ethylbenzene	0.0500	0.0473		mg/Kg		95	61 - 136
Methyl tert-butyl ether	0.0500	0.0446		mg/Kg		89	50 - 140
Methylene Chloride	0.0500	0.0450		mg/Kg		90	70 - 126
Styrene	0.0500	0.0450		mg/Kg		90	70 - 125
Tetrachloroethene	0.0500	0.0479		mg/Kg		96	70 - 124
Toluene	0.0500	0.0475		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0432		mg/Kg		86	70 - 125
Trichloroethene	0.0500	0.0470		mg/Kg		94	70 - 125
Vinyl acetate	0.0500	0.0366		mg/Kg		73	40 - 153
Vinyl chloride	0.0500	0.0445		mg/Kg		89	70 - 125
Xylenes, Total	0.100	0.0947		mg/Kg		95	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	89		75 - 126
Toluene-d8 (Surr)	97		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-518336/5
Matrix: Solid
Analysis Batch: 518336

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0460		mg/Kg		92	70 - 128	2	30
1,1,2,2-Tetrachloroethane	0.0500	0.0420		mg/Kg		84	70 - 122	2	30
1,1,2-Trichloroethane	0.0500	0.0429		mg/Kg		86	70 - 125	0	30
1,1-Dichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125	2	30
1,1-Dichloroethene	0.0500	0.0469		mg/Kg		94	70 - 120	2	30
1,2-Dichloroethane	0.0500	0.0443		mg/Kg		89	70 - 130	0	30
1,2-Dichloropropane	0.0500	0.0435		mg/Kg		87	70 - 125	1	30
2-Butanone (MEK)	0.0500	0.0440		mg/Kg		88	47 - 138	6	30
2-Hexanone	0.0500	0.0441		mg/Kg		88	48 - 146	7	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0433		mg/Kg		87	50 - 148	7	30
Acetone	0.0500	0.0509		mg/Kg		102	40 - 150	8	30
Benzene	0.0500	0.0453		mg/Kg		91	70 - 125	2	30
Bromodichloromethane	0.0500	0.0426		mg/Kg		85	67 - 129	1	30
Bromoform	0.0500	0.0393		mg/Kg		79	68 - 136	3	30
Bromomethane	0.0500	0.0488		mg/Kg		98	70 - 130	8	30
Carbon disulfide	0.0500	0.0445		mg/Kg		89	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0461		mg/Kg		92	75 - 125	3	30
Chlorobenzene	0.0500	0.0466		mg/Kg		93	50 - 150	2	30
Chloroethane	0.0500	0.0513		mg/Kg		103	75 - 125	10	30
Chloroform	0.0500	0.0447		mg/Kg		89	57 - 135	2	30
Chloromethane	0.0500	0.0465		mg/Kg		93	70 - 125	10	30
cis-1,2-Dichloroethene	0.0500	0.0454		mg/Kg		91	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0439		mg/Kg		88	70 - 125	1	30
Dibromochloromethane	0.0500	0.0418		mg/Kg		84	69 - 125	2	30
Ethylbenzene	0.0500	0.0460		mg/Kg		92	61 - 136	3	30
Methyl tert-butyl ether	0.0500	0.0451		mg/Kg		90	50 - 140	1	30
Methylene Chloride	0.0500	0.0443		mg/Kg		89	70 - 126	2	30
Styrene	0.0500	0.0449		mg/Kg		90	70 - 125	0	30
Tetrachloroethene	0.0500	0.0468		mg/Kg		94	70 - 124	2	30
Toluene	0.0500	0.0464		mg/Kg		93	70 - 125	2	30
trans-1,2-Dichloroethene	0.0500	0.0460		mg/Kg		92	70 - 125	2	30
trans-1,3-Dichloropropene	0.0500	0.0430		mg/Kg		86	70 - 125	0	30
Trichloroethene	0.0500	0.0461		mg/Kg		92	70 - 125	2	30
Vinyl acetate	0.0500	0.0382		mg/Kg		76	40 - 153	4	30
Vinyl chloride	0.0500	0.0489		mg/Kg		98	70 - 125	9	30
Xylenes, Total	0.100	0.0940		mg/Kg		94	53 - 147	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	88		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518572/7
Matrix: Solid
Analysis Batch: 518572

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/04/19 11:29	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/04/19 11:29	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/04/19 11:29	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 11:29	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 11:29	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/04/19 11:29	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/04/19 11:29	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/04/19 11:29	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/04/19 11:29	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/04/19 11:29	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/04/19 11:29	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/04/19 11:29	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/04/19 11:29	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/04/19 11:29	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/04/19 11:29	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/04/19 11:29	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/04/19 11:29	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/04/19 11:29	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/04/19 11:29	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/04/19 11:29	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 11:29	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/04/19 11:29	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/04/19 11:29	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/04/19 11:29	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/04/19 11:29	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/04/19 11:29	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/04/19 11:29	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/04/19 11:29	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/04/19 11:29	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/04/19 11:29	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/04/19 11:29	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/04/19 11:29	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/04/19 11:29	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/04/19 11:29	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/04/19 11:29	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/04/19 11:29	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/04/19 11:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/04/19 11:29	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/04/19 11:29	1
Dibromofluoromethane	86		75 - 126		12/04/19 11:29	1
Toluene-d8 (Surr)	95		75 - 124		12/04/19 11:29	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518572/4

Matrix: Solid

Analysis Batch: 518572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0408		mg/Kg		82	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0421		mg/Kg		84	70 - 122
1,1,2-Trichloroethane	0.0500	0.0427		mg/Kg		85	70 - 125
1,1-Dichloroethane	0.0500	0.0407		mg/Kg		81	70 - 125
1,1-Dichloroethene	0.0500	0.0412		mg/Kg		82	70 - 120
1,2-Dichloroethane	0.0500	0.0409		mg/Kg		82	70 - 130
1,2-Dichloropropane	0.0500	0.0406		mg/Kg		81	70 - 125
2-Butanone (MEK)	0.0500	0.0410		mg/Kg		82	47 - 138
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0384		mg/Kg		77	50 - 148
Acetone	0.0500	0.0489		mg/Kg		98	40 - 150
Benzene	0.0500	0.0421		mg/Kg		84	70 - 125
Bromodichloromethane	0.0500	0.0396		mg/Kg		79	67 - 129
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136
Bromomethane	0.0500	0.0397		mg/Kg		79	70 - 130
Carbon disulfide	0.0500	0.0396		mg/Kg		79	70 - 129
Carbon tetrachloride	0.0500	0.0402		mg/Kg		80	75 - 125
Chlorobenzene	0.0500	0.0441		mg/Kg		88	50 - 150
Chloroethane	0.0500	0.0404		mg/Kg		81	75 - 125
Chloroform	0.0500	0.0399		mg/Kg		80	57 - 135
Chloromethane	0.0500	0.0360		mg/Kg		72	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0403		mg/Kg		81	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125
Dibromochloromethane	0.0500	0.0384		mg/Kg		77	69 - 125
Ethylbenzene	0.0500	0.0423		mg/Kg		85	61 - 136
Methyl tert-butyl ether	0.0500	0.0401		mg/Kg		80	50 - 140
Methylene Chloride	0.0500	0.0405		mg/Kg		81	70 - 126
Styrene	0.0500	0.0419		mg/Kg		84	70 - 125
Tetrachloroethene	0.0500	0.0441		mg/Kg		88	70 - 124
Toluene	0.0500	0.0437		mg/Kg		87	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0411		mg/Kg		82	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0420		mg/Kg		84	70 - 125
Trichloroethene	0.0500	0.0433		mg/Kg		87	70 - 125
Vinyl acetate	0.0500	0.0344		mg/Kg		69	40 - 153
Vinyl chloride	0.0500	0.0391		mg/Kg		78	70 - 125
Xylenes, Total	0.100	0.0860		mg/Kg		86	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		70 - 134
4-Bromofluorobenzene (Surr)	95		75 - 131
Dibromofluoromethane	87		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518580/1-A
Matrix: Solid
Analysis Batch: 518922

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518580

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/04/19 08:05	12/05/19 16:52	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518580/1-A
Matrix: Solid
Analysis Batch: 518922

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518580

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/04/19 08:05	12/05/19 16:52	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/04/19 08:05	12/05/19 16:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	84		31 - 166	12/04/19 08:05	12/05/19 16:52	1
Phenol-d5	83		30 - 153	12/04/19 08:05	12/05/19 16:52	1
Nitrobenzene-d5	113		37 - 147	12/04/19 08:05	12/05/19 16:52	1
2-Fluorobiphenyl	101		43 - 145	12/04/19 08:05	12/05/19 16:52	1
2,4,6-Tribromophenol	76		31 - 143	12/04/19 08:05	12/05/19 16:52	1
Terphenyl-d14	103		42 - 157	12/04/19 08:05	12/05/19 16:52	1

Lab Sample ID: LCS 500-518580/2-A
Matrix: Solid
Analysis Batch: 518752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-chloroethyl)ether	1.33	0.905		mg/Kg		68	55 - 111
1,3-Dichlorobenzene	1.33	1.10		mg/Kg		83	65 - 124
1,4-Dichlorobenzene	1.33	1.17		mg/Kg		88	61 - 110
1,2-Dichlorobenzene	1.33	1.17		mg/Kg		88	62 - 110
2-Methylphenol	1.33	1.18		mg/Kg		89	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.787		mg/Kg		59	40 - 124
N-Nitrosodi-n-propylamine	1.33	0.934		mg/Kg		70	56 - 118
Hexachloroethane	1.33	1.16		mg/Kg		87	60 - 114
2-Chlorophenol	1.33	1.15		mg/Kg		86	64 - 110
Nitrobenzene	1.33	1.26		mg/Kg		95	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.01		mg/Kg		76	60 - 112
1,2,4-Trichlorobenzene	1.33	1.16		mg/Kg		87	66 - 117
Isophorone	1.33	1.02		mg/Kg		77	55 - 110
2,4-Dimethylphenol	1.33	1.13		mg/Kg		85	60 - 110
Hexachlorobutadiene	1.33	1.29		mg/Kg		97	56 - 120
Naphthalene	1.33	1.23		mg/Kg		92	63 - 110
2,4-Dichlorophenol	1.33	0.968		mg/Kg		73	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518580/2-A

Matrix: Solid

Analysis Batch: 518752

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 518580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.16		mg/Kg		87	30 - 150
2,4,6-Trichlorophenol	1.33	1.07		mg/Kg		80	57 - 120
2,4,5-Trichlorophenol	1.33	1.09		mg/Kg		82	50 - 120
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		9	10 - 133
2-Methylnaphthalene	1.33	1.25		mg/Kg		94	69 - 112
2-Nitroaniline	1.33	1.27		mg/Kg		95	57 - 124
2-Chloronaphthalene	1.33	1.34		mg/Kg		100	69 - 114
4-Chloro-3-methylphenol	1.33	1.25		mg/Kg		94	65 - 122
2,6-Dinitrotoluene	1.33	1.38		mg/Kg		104	70 - 123
2-Nitrophenol	1.33	1.21		mg/Kg		91	60 - 120
3-Nitroaniline	1.33	1.10		mg/Kg		82	40 - 122
Dimethyl phthalate	1.33	1.25		mg/Kg		94	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		13	10 - 100
Acenaphthylene	1.33	1.40		mg/Kg		105	68 - 120
2,4-Dinitrotoluene	1.33	1.14		mg/Kg		86	69 - 124
Acenaphthene	1.33	1.31		mg/Kg		99	65 - 124
Dibenzofuran	1.33	1.29		mg/Kg		97	66 - 115
4-Nitrophenol	2.67	1.72		mg/Kg		65	30 - 122
Fluorene	1.33	1.30		mg/Kg		97	62 - 120
4-Nitroaniline	1.33	1.37		mg/Kg		103	60 - 160
4-Bromophenyl phenyl ether	1.33	1.13		mg/Kg		85	68 - 118
Hexachlorobenzene	1.33	1.28		mg/Kg		96	63 - 124
Diethyl phthalate	1.33	1.19		mg/Kg		89	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.21		mg/Kg		91	62 - 119
Pentachlorophenol	2.67	0.769		mg/Kg		29	13 - 112
N-Nitrosodiphenylamine	1.33	1.32		mg/Kg		99	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.24		mg/Kg		47	10 - 110
Phenanthrene	1.33	1.24		mg/Kg		93	62 - 120
Anthracene	1.33	1.25		mg/Kg		94	70 - 114
Carbazole	1.33	1.34		mg/Kg		101	65 - 142
Di-n-butyl phthalate	1.33	1.29		mg/Kg		96	65 - 120
Fluoranthene	1.33	1.24		mg/Kg		93	62 - 120
Pyrene	1.33	1.16		mg/Kg		87	61 - 128
Butyl benzyl phthalate	1.33	1.29		mg/Kg		97	71 - 129
Benzo[a]anthracene	1.33	1.19		mg/Kg		89	67 - 122
Chrysene	1.33	1.26		mg/Kg		95	63 - 120
3,3'-Dichlorobenzidine	1.33	0.892		mg/Kg		67	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.29		mg/Kg		97	72 - 131
Di-n-octyl phthalate	1.33	1.58		mg/Kg		118	68 - 134
Benzo[b]fluoranthene	1.33	1.50		mg/Kg		112	69 - 129
Benzo[k]fluoranthene	1.33	1.31		mg/Kg		98	68 - 127
Benzo[a]pyrene	1.33	1.32		mg/Kg		99	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.28		mg/Kg		96	68 - 130
Dibenz(a,h)anthracene	1.33	1.25		mg/Kg		94	64 - 131
Benzo[g,h,i]perylene	1.33	1.27		mg/Kg		95	72 - 131
3 & 4 Methylphenol	1.33	0.954		mg/Kg		72	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518580/2-A
Matrix: Solid
Analysis Batch: 518752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518580

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	96		31 - 166
Phenol-d5	82		30 - 153
Nitrobenzene-d5	89		37 - 147
2-Fluorobiphenyl	95		43 - 145
2,4,6-Tribromophenol	91		31 - 143
Terphenyl-d14	80		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-518491/2-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518491

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Manganese	0.500	0.477		mg/L		95	80 - 120	
Nickel	0.500	0.487		mg/L		97	80 - 120	

Lab Sample ID: LCS 500-518493/2-A
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Beryllium	0.0500	0.0490		mg/L		98	80 - 120	
Boron	1.00	0.893		mg/L		89	80 - 120	
Cadmium	0.0500	0.0470		mg/L		94	80 - 120	
Chromium	0.200	0.190		mg/L		95	80 - 120	
Cobalt	0.500	0.470		mg/L		94	80 - 120	
Iron	1.00	0.936		mg/L		94	80 - 120	
Lead	0.100	0.131	*	mg/L		131	80 - 120	
Manganese	0.500	0.493		mg/L		99	80 - 120	
Nickel	0.500	0.472		mg/L		94	80 - 120	
Selenium	0.100	0.0935		mg/L		94	80 - 120	
Silver	0.0500	0.0466		mg/L		93	80 - 120	
Zinc	0.500	0.459	J	mg/L		92	80 - 120	

Lab Sample ID: MB 500-518510/1-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518510

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.410	J	2.0	0.39	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Barium	<1.0		1.0	0.11	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Boron	0.514	J	5.0	0.47	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Cadmium	0.0403	J	0.20	0.036	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Calcium	10.5	J	20	3.4	mg/Kg		12/03/19 17:54	12/04/19 16:53	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-518510/1-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518510

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	0.555	J	1.0	0.50	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Copper	<1.0		1.0	0.28	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Iron	<20		20	10	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Lead	<0.50		0.50	0.23	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Magnesium	5.01	J	10	5.0	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Potassium	<50		50	18	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Silver	<0.50		0.50	0.13	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Sodium	<100		100	15	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/03/19 17:54	12/04/19 16:53	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/03/19 17:54	12/04/19 16:53	1

Lab Sample ID: LCS 500-518510/2-A
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Arsenic	10.0	8.59		mg/Kg		86	80 - 120	
Barium	200	194		mg/Kg		97	80 - 120	
Beryllium	5.00	4.55		mg/Kg		91	80 - 120	
Boron	100	85.2		mg/Kg		85	80 - 120	
Cadmium	5.00	4.44		mg/Kg		89	80 - 120	
Calcium	1000	917		mg/Kg		92	80 - 120	
Chromium	20.0	18.7		mg/Kg		94	80 - 120	
Cobalt	50.0	47.5		mg/Kg		95	80 - 120	
Copper	25.0	24.1		mg/Kg		96	80 - 120	
Iron	100	95.5		mg/Kg		95	80 - 120	
Lead	10.0	8.90		mg/Kg		89	80 - 120	
Magnesium	1000	915		mg/Kg		92	80 - 120	
Manganese	50.0	46.6		mg/Kg		93	80 - 120	
Nickel	50.0	47.7		mg/Kg		95	80 - 120	
Potassium	1000	993		mg/Kg		99	80 - 120	
Selenium	10.0	8.11		mg/Kg		81	80 - 120	
Silver	5.00	4.38		mg/Kg		88	80 - 120	
Sodium	1000	985		mg/Kg		99	80 - 120	
Thallium	10.0	8.91		mg/Kg		89	80 - 120	
Vanadium	50.0	47.5		mg/Kg		95	80 - 120	
Zinc	50.0	45.5		mg/Kg		91	80 - 120	

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518998/2-A
Matrix: Solid
Analysis Batch: 519201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518998
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.0974		mg/L		97	80 - 120

Lab Sample ID: LB 500-517877/1-C
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518493

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/03/19 15:52	12/04/19 15:24	1
Boron	<0.50		0.50	0.050	mg/L		12/03/19 15:52	12/04/19 15:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/03/19 15:52	12/04/19 15:24	1
Chromium	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Cobalt	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Iron	<0.40		0.40	0.20	mg/L		12/03/19 15:52	12/04/19 15:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/19 15:52	12/04/19 15:24	1
Manganese	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Selenium	<0.050		0.050	0.020	mg/L		12/03/19 15:52	12/04/19 15:24	1
Silver	<0.025		0.025	0.010	mg/L		12/03/19 15:52	12/04/19 15:24	1
Zinc	0.0439	J	0.50	0.020	mg/L		12/03/19 15:52	12/04/19 15:24	1

Lab Sample ID: 500-173940-11 MS
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: 2615V2-01-B53 (0-6)
Prep Type: TCLP
Prep Batch: 518493
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	0.13	J	0.500	0.567		mg/L		87	75 - 125
Beryllium	<0.0040		0.0500	0.0457		mg/L		91	75 - 125
Boron	0.087	J	1.00	0.919		mg/L		83	75 - 125
Cadmium	<0.0050		0.0500	0.0489		mg/L		98	75 - 125
Chromium	<0.025		0.200	0.169		mg/L		84	75 - 125
Cobalt	0.059		0.500	0.515		mg/L		91	75 - 125
Iron	<0.40		1.00	0.833		mg/L		83	75 - 125
Lead	<0.0075	*	0.100	0.0911		mg/L		91	75 - 125
Manganese	2.3		0.500	2.65	4	mg/L		70	75 - 125
Nickel	0.19		0.500	0.665		mg/L		94	75 - 125
Selenium	<0.050		0.100	0.106		mg/L		106	75 - 125
Silver	<0.025		0.0500	0.0535		mg/L		107	75 - 125
Zinc	0.12	J F1 B	0.500	0.490	J F1	mg/L		74	75 - 125

Lab Sample ID: 500-173940-11 DU
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: 2615V2-01-B53 (0-6)
Prep Type: TCLP
Prep Batch: 518493

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.13	J	0.132	J	mg/L		2	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.087	J	0.0883	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-173940-11 DU
Matrix: Solid
Analysis Batch: 518818

Client Sample ID: 2615V2-01-B53 (0-6)
Prep Type: TCLP
Prep Batch: 518493

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.059		0.0605		mg/L		2	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075	*	<0.0075	*	mg/L		NC	20
Manganese	2.3		2.27		mg/L		1	20
Nickel	0.19		0.197		mg/L		1	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.12	J F1 B	0.121	J	mg/L		2	20

Lab Sample ID: LB 500-517877/1-D
Matrix: Solid
Analysis Batch: 519201

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518998

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:46	12/06/19 10:21	1

Lab Sample ID: LB 500-517874/1-B
Matrix: Solid
Analysis Batch: 518808

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 518491

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/03/19 15:50	12/04/19 21:22	1
Manganese	<0.025		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 21:22	1
Nickel	<0.025		0.025	0.010	mg/L		12/03/19 15:50	12/04/19 21:22	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-518493/2-A
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LB 500-517877/1-C
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518493

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/03/19 15:52	12/04/19 23:12	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/03/19 15:52	12/04/19 23:12	1

Lab Sample ID: 500-173940-11 MS
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: 2615V2-01-B53 (0-6)
Prep Type: TCLP
Prep Batch: 518493

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Antimony	<0.0060		0.500	0.541		mg/L		108	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-173940-11 MS
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: 2615V2-01-B53 (0-6)
Prep Type: TCLP
Prep Batch: 518493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	<0.0020		0.100	0.0990		mg/L		99	75 - 125

Lab Sample ID: 500-173940-11 DU
Matrix: Solid
Analysis Batch: 518854

Client Sample ID: 2615V2-01-B53 (0-6)
Prep Type: TCLP
Prep Batch: 518493

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-518400/12-A
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 07:54	1

Lab Sample ID: LCS 500-518400/13-A
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518400

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00218		mg/L		109	80 - 120

Lab Sample ID: LCSD 500-518400/37-A
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 518400

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.00200	0.00210		mg/L		105	80 - 120	3	20

Lab Sample ID: LB 500-517877/1-B
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518400

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/03/19 09:25	12/04/19 07:57	1

Lab Sample ID: 500-173940-6 MS
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: 2615V2-01-B16 (0-5)
Prep Type: TCLP
Prep Batch: 518400

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00107		mg/L		107	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-173940-6 MSD
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: 2615V2-01-B16 (0-5)
Prep Type: TCLP
Prep Batch: 518400

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00100		mg/L		100	75 - 125	6	20

Lab Sample ID: 500-173940-6 DU
Matrix: Solid
Analysis Batch: 518657

Client Sample ID: 2615V2-01-B16 (0-5)
Prep Type: TCLP
Prep Batch: 518400

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-518206/12-A
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/02/19 15:05	12/03/19 09:45	1

Lab Sample ID: LCS 500-518206/13-A
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.137		mg/Kg		82	80 - 120

Lab Sample ID: 500-173940-8 MS
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: 2615V2-01-B16 (10-15)
Prep Type: Total/NA
Prep Batch: 518206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.017	J	0.0948	0.0982		mg/Kg	☼	86	75 - 125

Lab Sample ID: 500-173940-8 MSD
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: 2615V2-01-B16 (10-15)
Prep Type: Total/NA
Prep Batch: 518206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.017	J	0.0948	0.105		mg/Kg	☼	93	75 - 125	7	20

Lab Sample ID: 500-173940-8 DU
Matrix: Solid
Analysis Batch: 518416

Client Sample ID: 2615V2-01-B16 (10-15)
Prep Type: Total/NA
Prep Batch: 518206

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.017	J	0.0168	J	mg/Kg	☼	2	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Method: 9045D - pH

Lab Sample ID: 500-173940-2 DU
Matrix: Solid
Analysis Batch: 517553

Client Sample ID: 2615V2-01-B15 (5-10)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.8		7.8		SU		0.1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B15 (0-5)

Lab Sample ID: 500-173940-1

Date Collected: 11/21/19 10:18

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 15:56	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:31	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:04	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
					(Start)	11/27/19 12:52		
					(End)	11/27/19 12:54		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B15 (0-5)

Lab Sample ID: 500-173940-1

Date Collected: 11/21/19 10:18

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 14:01	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		10	519122	12/06/19 13:41	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:01	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:41	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 09:49	MJG	TAL CHI

Client Sample ID: 2615V2-01-B15 (5-10)

Lab Sample ID: 500-173940-2

Date Collected: 11/21/19 10:25

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 21:47	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:00	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:35	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B15 (5-10)

Lab Sample ID: 500-173940-2

Date Collected: 11/21/19 10:25

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:06	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553	JJB	TAL CHI	
					(Start)	11/27/19 12:57		
					(End)	11/27/19 12:59		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B15 (5-10)

Lab Sample ID: 500-173940-2

Date Collected: 11/21/19 10:25

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 14:26	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 21:05	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:05	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:45	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 09:51	MJG	TAL CHI

Client Sample ID: 2615V2-01-B15 (10-15)

Lab Sample ID: 500-173940-3

Date Collected: 11/21/19 10:31

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 21:51	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:05	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:39	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:07	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553	JJB	TAL CHI	
					(Start)	11/27/19 13:02		
					(End)	11/27/19 13:04		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B15 (10-15)

Lab Sample ID: 500-173940-3

Date Collected: 11/21/19 10:31

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 14:52	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 21:28	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:09	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:49	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 09:54	MJG	TAL CHI

Client Sample ID: 2615V2-01-B15 (10-15)D

Lab Sample ID: 500-173940-4

Date Collected: 11/21/19 10:31

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:07	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:09	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:43	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:12	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553	(Start) 11/27/19 13:04 (End) 11/27/19 13:07	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B15 (10-15)D

Lab Sample ID: 500-173940-4

Date Collected: 11/21/19 10:31

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 15:17	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 21:51	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:13	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B15 (10-15)D

Lab Sample ID: 500-173940-4

Date Collected: 11/21/19 10:31

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:53	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 09:56	MJG	TAL CHI

Client Sample ID: 2615V2-01-B15 (15-20)

Lab Sample ID: 500-173940-5

Date Collected: 11/21/19 10:40

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:11	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:14	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/04/19 23:46	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:14	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
					(Start)	11/27/19 13:07		
					(End)	11/27/19 13:09		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B15 (15-20)

Lab Sample ID: 500-173940-5

Date Collected: 11/21/19 10:40

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 15:43	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 22:14	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:17	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 11:57	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 09:58	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Date Collected: 11/21/19 11:05

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:15	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:19	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/05/19 00:01	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:16	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553	(Start) 11/27/19 13:09 (End) 11/27/19 13:12	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B16 (0-5)

Lab Sample ID: 500-173940-6

Date Collected: 11/21/19 11:05

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 11:55	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 22:37	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:21	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 12:09	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:00	MJG	TAL CHI

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:19	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:23	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/05/19 00:05	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:22	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
					(Start)	11/27/19 13:12		
					(End)	11/27/19 13:14		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B16 (5-10)

Lab Sample ID: 500-173940-7

Date Collected: 11/21/19 11:15

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 16:34	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 23:00	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:25	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 12:13	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:02	MJG	TAL CHI

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:23	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:28	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/05/19 00:09	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:25	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B16 (10-15)

Lab Sample ID: 500-173940-8

Date Collected: 11/21/19 11:20

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 17:00	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 23:23	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:29	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 12:17	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:04	MJG	TAL CHI

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Date Collected: 11/21/19 11:30

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:27	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:32	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/05/19 00:13	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
					(Start)	11/27/19 13:17		
					(End)	11/27/19 13:19		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B16 (15-20)

Lab Sample ID: 500-173940-9

Date Collected: 11/21/19 11:30

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 17:26	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/05/19 23:45	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:41	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 12:21	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:17	MJG	TAL CHI

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:31	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518998	12/05/19 15:46	BDE	TAL CHI
TCLP	Analysis	6010B		1	519201	12/06/19 10:25	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:37	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/05/19 00:16	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
					(Start)	11/27/19 13:19		
					(End)	11/27/19 13:22		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 17:51	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/06/19 00:08	AJD	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Client Sample ID: 2615V2-01-B54 (0-4)

Lab Sample ID: 500-173940-10

Date Collected: 11/21/19 13:36

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:45	EEN	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		10	518947	12/05/19 12:25	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:19	MJG	TAL CHI

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Date Collected: 11/21/19 14:00

Matrix: Solid

Date Received: 11/21/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			517874	11/29/19 12:10	GCA	TAL CHI
SPLP East	Prep	3010A			518491	12/03/19 15:50	BDE	TAL CHI
SPLP East	Analysis	6010B		1	518808	12/04/19 22:35	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6010B		1	518818	12/04/19 16:50	EEN	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	3010A			518493	12/03/19 15:52	BDE	TAL CHI
TCLP	Analysis	6020A		1	518854	12/05/19 00:20	FXG	TAL CHI
TCLP	Leach	1311			517877	11/29/19 12:10	GCA	TAL CHI
TCLP	Prep	7470A			518400	12/03/19 09:25	MJG	TAL CHI
TCLP	Analysis	7470A		1	518657	12/04/19 08:33	MJG	TAL CHI
Total/NA	Analysis	9045D		1	517553		JJB	TAL CHI
					(Start)	11/27/19 13:24		
					(End)	11/27/19 13:26		
Total/NA	Analysis	Moisture		1	517591	11/27/19 09:52	LWN	TAL CHI

Client Sample ID: 2615V2-01-B53 (0-6)

Lab Sample ID: 500-173940-11

Date Collected: 11/21/19 14:00

Matrix: Solid

Date Received: 11/21/19 16:00

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518046	11/22/19 18:15	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518336	12/03/19 18:17	PMF	TAL CHI
Total/NA	Prep	3541			518580	12/04/19 08:05	DAK	TAL CHI
Total/NA	Analysis	8270D		1	518922	12/06/19 00:31	AJD	TAL CHI
Total/NA	Prep	3050B			518510	12/03/19 17:54	BDE	TAL CHI
Total/NA	Analysis	6010B		1	518808	12/04/19 18:49	EEN	TAL CHI
Total/NA	Prep	7471B			518206	12/02/19 15:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518416	12/03/19 10:21	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-173940-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.6200 Fax: 708.534



500-173940 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173940
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 4.853

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
E+E		1009341.0447.01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix		Comments	
176-001-W047E				Date Time		# of Containers Matrix					
Project Location/State		Lab PM									
Chicago, IL		R. Wright									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/TeCP	pH	Percent Solids
1		2615V2-01-B15(0-5)	11/21/19	1018	5	S	X	X	X	X	X
2		2615V2-01-B15(5-10)	11/21/19	1025	5	S	X	X	X	X	X
3		2615V2-01-B15(10-15)	11/21/19	1031	5	S	X	X	X	X	X
4		2615V2-01-B15(10-15)D	11/21/19	1031	5	S	X	X	X	X	X
5		2615V2-01-B15(15-20)	11/21/19	1040	5	S	X	X	X	X	X
6		2615V2-01-B16(0-5)	11/21/19	1105	5	S	X	X	X	X	X
7		2615V2-01-B16(5-10)	11/21/19	1115	5	S	X	X	X	X	X
8		2615V2-01-B16(10-15)	11/21/19	1120	5	S	X	X	X	X	X
9		2615V2-01-B16(15-20)	11/21/19	1130	5	S	X	X	X	X	X

Turnaround Time Required (Business Days) 10 Days
Requested Due Date _____
Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>K. Hughes</u> Company: <u>E+E</u> Date: <u>11/21/19</u> Time: <u>1450</u>	Received By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/21/19</u> Time: <u>1450</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>[Signature]</u> Company: <u>TA</u> Date: <u>11/21/19</u> Time: <u>1600</u>	Received By: <u>[Signature]</u> Company: <u>TA-CHE</u> Date: <u>11/21/19</u> Time: <u>1600</u>	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments: _____
 Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-173940
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
E+E		1009341.0447.01									
Project Name		Lab Project #		# of Containers		VOC		SVOC		Total/TCUP Metals	
176-001-W047E											
Project Location/State		Lab Project #		Matrix		pH		Percent Solids			
Chicago, IL											
Sampler		Lab PM									
AH, JH		R. Wright									
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix					Comments
			Date	Time							
10		2615V2-01-B54(0-4)	11/21/19	1336	5	S	X	X	X	X	
11		2615V2-01-B53(0-6)	11/21/19	1400	5	S	X	X	X	X	

- Preservative Key
- HCL, Cool to 4°
 - H2SO4, Cool to 4°
 - HNO3, Cool to 4°
 - NaOH, Cool to 4°
 - NaOH/Zn, Cool to 4°
 - NaHSO4
 - Cool to 4°
 - None
 - Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>J. Henderson</u>	Company: <u>E+E</u>	Date: <u>11/21/19</u>	Time: <u>1450</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/21/19</u>	Time: <u>1450</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/21/19</u>	Time: <u>1600</u>	Received By: <u>[Signature]</u>	Company: <u>TA-GTI</u>	Date: <u>11/21/19</u>	Time: <u>1600</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-173940-1

Login Number: 173940

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8,5.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174037-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/10/2019 11:26:35 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Job ID: 500-174037-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174037-1

Receipt

The samples were received on 11/22/2019 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.2° C and 5.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-518838 and analytical batch 500-519028 recovered outside control limits for the following analytes: 2,2'-oxybis[1-chloropropane], 2-Methylphenol, 2-Nitroaniline, 2-Chlorophenol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, N-Nitrosodi-n-propylamine, Isophorone, Nitrobenzene and Phenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 519026 had 2 analytes outside control limits: 2,4-Dinitrophenol and Naphthalene. These results have been reported and qualified. (LCS 500-519014/2-A)

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-174037-E-1-L MS) and (500-174037-E-1-M MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The method blank for preparation batch 500-518768 and analytical batch 500-519054 contained copper above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.038		0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
Acenaphthene	0.020	J	0.039	0.0071	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.096		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.65	J F1	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0	F1	0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	27		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.51		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	13	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	14	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B F1	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	16	F1	0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	250	F2	0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	32		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2200		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.45	J F1	0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8	B	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.75	F1	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	40	F1 F2	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.10		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.027	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.098		0.025	0.010	mg/L	1		6010B	SPLP East
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.049	J	0.082	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.040		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.54	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.054	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	31000		12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	18	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(6-12) (Continued)

Lab Sample ID: 500-174037-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	16		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	34	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	44		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.42	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.47	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.029		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.071		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.020	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.028		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0080	J	0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.063	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.020	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.83	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.079	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		58	8.6	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(12-18) (Continued)

Lab Sample ID: 500-174037-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.92		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.57		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.094	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0094	J	0.019	0.0082	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.047	J	0.084	0.0077	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.042	0.0058	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.024	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0091	J	0.042	0.0081	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.97	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	21	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.076	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3500		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.028		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.026		0.020	0.0087	mg/Kg	1	☼	8260B	Total/NA
Trichloroethene	0.00072	J	0.0020	0.00067	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.038	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.081		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.56	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.9		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.095	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	26	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.69		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.78		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.00030		0.00020	0.00020	mg/L	1		7470A	TCLP
Mercury	0.026		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.020	0.0088	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.11		0.046	0.0064	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.046	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.60	J	1.4	0.27	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.6		0.69	0.24	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.69	0.079	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.87		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Boron	22	B	3.5	0.32	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.14	0.025	mg/Kg	1	☼	6010B	Total/NA
Calcium	39000		14	2.3	mg/Kg	1	☼	6010B	Total/NA
Chromium	22	B	0.69	0.34	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(0-6) (Continued)

Lab Sample ID: 500-174037-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	16		0.35	0.091	mg/Kg	1	☼	6010B	Total/NA
Copper	30	B	0.69	0.19	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	14	7.2	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.35	0.16	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		6.9	3.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.69	0.10	mg/Kg	1	☼	6010B	Total/NA
Nickel	44		0.69	0.20	mg/Kg	1	☼	6010B	Total/NA
Potassium	4200		35	12	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.69	0.41	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7	B	0.35	0.089	mg/Kg	1	☼	6010B	Total/NA
Sodium	880		69	10	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.69	0.35	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.35	0.082	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.4	0.61	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.094	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.095		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.014	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.022	0.0074	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0077	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.026	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.071		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.010	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.65	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.4		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.093	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.62	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		31	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12) (Continued)

Lab Sample ID: 500-174037-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	53		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.053		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.033	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.068		0.031	0.014	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.026	J	0.089	0.0081	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.095		0.044	0.0062	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.015	J	0.044	0.0088	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.044	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.75	J	1.3	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.7		0.64	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.64	0.073	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.89		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Boron	21	B	3.2	0.30	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.074	J B	0.13	0.023	mg/Kg	1	☼	6010B	Total/NA
Calcium	31000		13	2.2	mg/Kg	1	☼	6010B	Total/NA
Chromium	23	B	0.64	0.32	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.32	0.084	mg/Kg	1	☼	6010B	Total/NA
Copper	26	B	0.64	0.18	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	13	6.6	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.32	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		6.4	3.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.64	0.093	mg/Kg	1	☼	6010B	Total/NA
Nickel	42		0.64	0.19	mg/Kg	1	☼	6010B	Total/NA
Potassium	4500		32	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.49	J	0.64	0.38	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7	B	0.32	0.082	mg/Kg	1	☼	6010B	Total/NA
Sodium	400		64	9.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.64	0.32	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.32	0.075	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.3	0.56	mg/Kg	1	☼	6010B	Total/NA
Barium	0.50		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.021	0.0070	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.028		0.018	0.0078	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.040	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.070		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.63	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.9		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.075	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.70		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.85		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.015	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.033	J	0.085	0.0077	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.070		0.042	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0096	J	0.042	0.0083	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.93	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.089	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	65000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	27	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.5	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(18-24) (Continued)

Lab Sample ID: 500-174037-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	28000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	J	0.62	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.72		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.31	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.026	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.036	J	0.083	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.070		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.014	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.62	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.8		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	16	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.080	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	26	B	0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.82		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(24-30) (Continued)

Lab Sample ID: 500-174037-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.039		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.019	0.0062	mg/Kg	1	*	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.024	J	0.080	0.0073	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.12		0.039	0.0055	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.042		0.039	0.0073	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.072		0.039	0.0078	mg/Kg	1	*	8270D	Total/NA
Benzo[a]anthracene	0.032	J	0.039	0.0053	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.057		0.039	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.46	J	1.1	0.22	mg/Kg	1	*	6010B	Total/NA
Arsenic	8.6		0.56	0.19	mg/Kg	1	*	6010B	Total/NA
Barium	29		0.56	0.064	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.71		0.23	0.053	mg/Kg	1	*	6010B	Total/NA
Boron	15	B	2.8	0.26	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.12	B	0.11	0.020	mg/Kg	1	*	6010B	Total/NA
Calcium	32000		11	1.9	mg/Kg	1	*	6010B	Total/NA
Chromium	17	B	0.56	0.28	mg/Kg	1	*	6010B	Total/NA
Cobalt	16		0.28	0.074	mg/Kg	1	*	6010B	Total/NA
Copper	35	B	0.56	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	20000	B	11	5.9	mg/Kg	1	*	6010B	Total/NA
Lead	18		0.28	0.13	mg/Kg	1	*	6010B	Total/NA
Magnesium	20000		5.6	2.8	mg/Kg	1	*	6010B	Total/NA
Manganese	290		0.56	0.082	mg/Kg	1	*	6010B	Total/NA
Nickel	43		0.56	0.16	mg/Kg	1	*	6010B	Total/NA
Potassium	2900		28	10	mg/Kg	1	*	6010B	Total/NA
Selenium	0.85		0.56	0.33	mg/Kg	1	*	6010B	Total/NA
Silver	2.0	B	0.28	0.073	mg/Kg	1	*	6010B	Total/NA
Sodium	730		56	8.4	mg/Kg	1	*	6010B	Total/NA
Thallium	1.1		0.56	0.28	mg/Kg	1	*	6010B	Total/NA
Vanadium	19		0.28	0.067	mg/Kg	1	*	6010B	Total/NA
Zinc	54		1.1	0.50	mg/Kg	1	*	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.056		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.12		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.027	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.031		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.035		0.018	0.0060	mg/Kg	1	*	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.015	J	0.030	0.013	mg/Kg	1	*	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(6-12) (Continued)

Lab Sample ID: 500-174037-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.0010	J	0.0060	0.00096	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.038	J	0.090	0.0082	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.044	0.0062	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.044	0.0089	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.039	J	0.044	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.63	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.1		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	49		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.80		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	20	B	3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.070	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	50000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	22	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	27	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	42		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	4000		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	J	0.62	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.7	B	0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	250		62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.31	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.79		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.21	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.063		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.022	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.028		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020	J	0.021	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.038		0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.036	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.082		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.023	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.56	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.7		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	14	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(12-18) (Continued)

Lab Sample ID: 500-174037-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.083	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	33	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.85		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0	B	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.99		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.035	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.018	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.021	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.051	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.084		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.74	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.7		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.069	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59	J	0.62	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		62	9.2	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(18-24) (Continued)

Lab Sample ID: 500-174037-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.94		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.027		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.00065	J	0.0017	0.00057	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.022	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.065		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.59	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.2		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.098	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.81		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.031		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0095	J	0.019	0.0084	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.046		0.043	0.0060	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.49	J	1.3	0.25	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.9		0.63	0.22	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.63	0.072	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.81		0.25	0.059	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	3.2	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.053	J B	0.13	0.023	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000		13	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	20	B	0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.32	0.083	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	13	6.6	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.32	0.15	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		6.3	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.63	0.092	mg/Kg	1	☼	6010B	Total/NA
Nickel	44		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		32	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4	B	0.32	0.081	mg/Kg	1	☼	6010B	Total/NA
Sodium	870		63	9.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.32	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.3	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.085		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.040	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.033		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.021	0.0069	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.037	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.077		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.39	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.7		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	20		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	13	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	1.6	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	95000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	10	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	36	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	53000		58	29	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(6-12) (Continued)

Lab Sample ID: 500-174037-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	980		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.95		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.2	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.49	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	370		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.059		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.039	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.022		0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.043	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.069		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.87	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	63000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	26	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	27000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67	F1	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8	F1	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(12-18) (Continued)

Lab Sample ID: 500-174037-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.045		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.020	0.0067	mg/Kg	1	*	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.030	J	0.085	0.0077	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.046		0.042	0.0058	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.011	J	0.042	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.72	J	1.2	0.24	mg/Kg	1	*	6010B	Total/NA
Arsenic	9.7		0.62	0.21	mg/Kg	1	*	6010B	Total/NA
Barium	42		0.62	0.071	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.66		0.25	0.058	mg/Kg	1	*	6010B	Total/NA
Boron	18	B	3.1	0.29	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.085	J B	0.12	0.022	mg/Kg	1	*	6010B	Total/NA
Calcium	57000		120	21	mg/Kg	10	*	6010B	Total/NA
Chromium	18	B	0.62	0.31	mg/Kg	1	*	6010B	Total/NA
Cobalt	14		0.31	0.082	mg/Kg	1	*	6010B	Total/NA
Copper	27	B	0.62	0.17	mg/Kg	1	*	6010B	Total/NA
Iron	20000	B	12	6.5	mg/Kg	1	*	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	*	6010B	Total/NA
Manganese	310		0.62	0.091	mg/Kg	1	*	6010B	Total/NA
Nickel	39		0.62	0.18	mg/Kg	1	*	6010B	Total/NA
Potassium	3100		31	11	mg/Kg	1	*	6010B	Total/NA
Silver	2.1	B	0.31	0.081	mg/Kg	1	*	6010B	Total/NA
Sodium	200		62	9.2	mg/Kg	1	*	6010B	Total/NA
Thallium	0.92		0.62	0.31	mg/Kg	1	*	6010B	Total/NA
Vanadium	21		0.31	0.074	mg/Kg	1	*	6010B	Total/NA
Zinc	52		1.2	0.55	mg/Kg	1	*	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.33	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	3.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.059		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.046	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.020	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0063	mg/Kg	1	*	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.80	J B	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	7.1		0.60	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	39		0.60	0.068	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.68		0.24	0.056	mg/Kg	1	*	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(24-30) (Continued)

Lab Sample ID: 500-174037-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	53000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.60		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		60	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.044		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.030	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174037-1	2615V2-AI-B11(0-6)	Solid	11/22/19 09:14	11/22/19 15:30	
500-174037-2	2615V2-AI-B11(6-12)	Solid	11/22/19 09:28	11/22/19 15:30	
500-174037-3	2615V2-AI-B11(12-18)	Solid	11/22/19 09:32	11/22/19 15:30	
500-174037-4	2615V2-AI-B11(18-24)	Solid	11/22/19 09:40	11/22/19 15:30	
500-174037-5	2615V2-AI-B11(24-30)	Solid	11/22/19 09:46	11/22/19 15:30	
500-174037-6	2615V2-AI-B10(0-6)	Solid	11/22/19 10:51	11/22/19 15:30	
500-174037-7	2615V2-AI-B10(6-12)	Solid	11/22/19 11:09	11/22/19 15:30	
500-174037-8	2615V2-AI-B10(6-12)D	Solid	11/22/19 11:09	11/22/19 15:30	
500-174037-9	2615V2-AI-B10(12-18)	Solid	11/22/19 11:15	11/22/19 15:30	
500-174037-10	2615V2-AI-B10(18-24)	Solid	11/22/19 11:20	11/22/19 15:30	
500-174037-11	2615V2-AI-B10(24-30)	Solid	11/22/19 11:26	11/22/19 15:30	
500-174037-12	2615V2-AI-B09(0-6)	Solid	11/22/19 12:38	11/22/19 15:30	
500-174037-13	2615V2-AI-B09(6-12)	Solid	11/22/19 12:43	11/22/19 15:30	
500-174037-14	2615V2-AI-B09(12-18)	Solid	11/22/19 12:50	11/22/19 15:30	
500-174037-15	2615V2-AI-B09(18-24)	Solid	11/22/19 12:54	11/22/19 15:30	
500-174037-16	2615V2-AI-B09(24-30)	Solid	11/22/19 13:00	11/22/19 15:30	
500-174037-17	2615V2-AI-B08(0-6)	Solid	11/22/19 13:51	11/22/19 15:30	
500-174037-18	2615V2-AI-B08(6-12)	Solid	11/22/19 14:00	11/22/19 15:30	
500-174037-19	2615V2-AI-B08(12-18)	Solid	11/22/19 14:05	11/22/19 15:30	
500-174037-20	2615V2-AI-B08(18-24)	Solid	11/22/19 14:11	11/22/19 15:30	
500-174037-21	2615V2-AI-B08(24-30)	Solid	11/22/19 14:18	11/22/19 15:30	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Date Collected: 11/22/19 09:14

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Acetone	0.038		0.019	0.0081	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/23/19 15:12	12/04/19 15:48	1
4-Bromofluorobenzene (Surr)	109		75 - 131	11/23/19 15:12	12/04/19 15:48	1
Dibromofluoromethane	92		75 - 126	11/23/19 15:12	12/04/19 15:48	1
Toluene-d8 (Surr)	97		75 - 124	11/23/19 15:12	12/04/19 15:48	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Date Collected: 11/22/19 09:14

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Hexachloroethane	<0.20	F1	0.20	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Hexachlorocyclopentadiene	<0.80	F1 *	0.80	0.23	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,4-Dinitrophenol	<0.80	F1 *	0.80	0.70	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Acenaphthene	0.020	J	0.039	0.0071	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
N-Nitrosodiphenylamine	<0.20	F1	0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
4,6-Dinitro-2-methylphenol	<0.80	F1	0.80	0.32	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Phenanthrene	0.096		0.039	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Pyrene	0.020	J	0.039	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Date Collected: 11/22/19 09:14

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Indeno[1,2,3-cd]pyrene	<0.039	F1	0.039	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Benzo[g,h,i]perylene	<0.039	F1	0.039	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 02:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		31 - 166				12/05/19 16:16	12/07/19 02:06	1
Phenol-d5	105		30 - 153				12/05/19 16:16	12/07/19 02:06	1
Nitrobenzene-d5	93		37 - 147				12/05/19 16:16	12/07/19 02:06	1
2-Fluorobiphenyl	97		43 - 145				12/05/19 16:16	12/07/19 02:06	1
2,4,6-Tribromophenol	80		31 - 143				12/05/19 16:16	12/07/19 02:06	1
Terphenyl-d14	104		42 - 157				12/05/19 16:16	12/07/19 02:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.65	J F1	1.1	0.22	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Arsenic	8.0	F1	0.56	0.19	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Barium	27		0.56	0.064	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Beryllium	0.51		0.22	0.052	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Boron	13	B	2.8	0.26	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Cadmium	0.11	B	0.11	0.020	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Calcium	57000		110	19	mg/Kg	☼	12/04/19 17:49	12/06/19 09:08	10
Chromium	14	B	0.56	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Cobalt	12		0.28	0.073	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Copper	31	B F1	0.56	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Iron	17000	B	11	5.8	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Lead	16	F1	0.28	0.13	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Magnesium	26000		5.6	2.8	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Manganese	250	F2	0.56	0.081	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Nickel	32		0.56	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Potassium	2200		28	9.9	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Selenium	0.45	J F1	0.56	0.33	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Silver	1.8	B	0.28	0.072	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Sodium	1100		56	8.3	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Thallium	0.75	F1	0.56	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Vanadium	16		0.28	0.066	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1
Zinc	40	F1 F2	1.1	0.49	mg/Kg	☼	12/04/19 17:49	12/05/19 14:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.35	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:07	1
Boron	0.070	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Date Collected: 11/22/19 09:14

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:07	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:07	1
Cobalt	0.042		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:07	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:07	1
Manganese	1.8		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:07	1
Nickel	0.10		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:07	1
Selenium	0.027 J		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:07	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:07	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:07	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.098		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:14	1
Nickel	0.022 J		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:14	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 08:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.019	0.0063	mg/Kg	☼	12/04/19 13:40	12/05/19 07:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/02/19 10:19	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Carbon disulfide	<0.0040		0.0040	0.00082	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/23/19 15:12	12/04/19 16:14	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/23/19 15:12	12/04/19 16:14	1
Dibromofluoromethane	88		75 - 126	11/23/19 15:12	12/04/19 16:14	1
Toluene-d8 (Surr)	98		75 - 124	11/23/19 15:12	12/04/19 16:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Hexachlorocyclopentadiene	<0.82	*	0.82	0.23	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2-Methylnaphthalene	0.049	J	0.082	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,4-Dinitrophenol	<0.82	*	0.82	0.71	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.32	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Phenanthrene	0.17		0.040	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.040		0.040	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 02:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		31 - 166				12/05/19 16:16	12/07/19 02:33	1
Phenol-d5	99		30 - 153				12/05/19 16:16	12/07/19 02:33	1
Nitrobenzene-d5	91		37 - 147				12/05/19 16:16	12/07/19 02:33	1
2-Fluorobiphenyl	91		43 - 145				12/05/19 16:16	12/07/19 02:33	1
2,4,6-Tribromophenol	47		31 - 143				12/05/19 16:16	12/07/19 02:33	1
Terphenyl-d14	93		42 - 157				12/05/19 16:16	12/07/19 02:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Arsenic	8.4		0.58	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Barium	32		0.58	0.066	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Beryllium	0.68		0.23	0.054	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Boron	17	B	2.9	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Cadmium	0.054	J B	0.12	0.021	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Calcium	31000		12	2.0	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Chromium	18	B	0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Cobalt	16		0.29	0.076	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Copper	34	B	0.58	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Iron	20000	B	12	6.0	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Lead	17		0.29	0.13	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Magnesium	20000		5.8	2.9	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Manganese	300		0.58	0.084	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Nickel	44		0.58	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Potassium	3100		29	10	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Selenium	0.42	J	0.58	0.34	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Silver	2.0	B	0.29	0.075	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Sodium	640		58	8.6	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1
Zinc	51		1.2	0.51	mg/Kg	☼	12/04/19 17:49	12/05/19 15:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.47	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:11	1
Boron	0.11	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:11	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:11	1
Cobalt	0.029		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:11	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:11	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:11	1
Manganese	1.9		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:11	1
Nickel	0.071		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:11	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:11	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:11	1
Zinc	0.020	J	0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:11	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:18	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 08:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.020	0.0065	mg/Kg	☼	12/04/19 13:40	12/05/19 07:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/19 10:25	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Date Collected: 11/22/19 09:32

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Acetone	0.0080	J	0.017	0.0072	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/23/19 15:12	12/04/19 16:40	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/23/19 15:12	12/04/19 16:40	1
Dibromofluoromethane	89		75 - 126	11/23/19 15:12	12/04/19 16:40	1
Toluene-d8 (Surr)	96		75 - 124	11/23/19 15:12	12/04/19 16:40	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Date Collected: 11/22/19 09:32

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Hexachlorocyclopentadiene	<0.81	*	0.81	0.23	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2-Methylnaphthalene	0.063	J	0.081	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Phenanthrene	0.11		0.040	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Pyrene	0.020	J	0.040	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Date Collected: 11/22/19 09:32

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.040	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 03:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	91		31 - 166				12/05/19 16:16	12/07/19 03:01	1
Phenol-d5	94		30 - 153				12/05/19 16:16	12/07/19 03:01	1
Nitrobenzene-d5	89		37 - 147				12/05/19 16:16	12/07/19 03:01	1
2-Fluorobiphenyl	88		43 - 145				12/05/19 16:16	12/07/19 03:01	1
2,4,6-Tribromophenol	38		31 - 143				12/05/19 16:16	12/07/19 03:01	1
Terphenyl-d14	87		42 - 157				12/05/19 16:16	12/07/19 03:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.83	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Arsenic	7.9		0.58	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Barium	37		0.58	0.067	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Beryllium	0.61		0.23	0.055	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Boron	19	B	2.9	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Cadmium	0.079	J B	0.12	0.021	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Calcium	59000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 09:28	10
Chromium	16	B	0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Copper	28	B	0.58	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Iron	19000	B	12	6.1	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Lead	15		0.29	0.13	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Magnesium	25000		5.8	2.9	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Manganese	330		0.58	0.085	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Nickel	36		0.58	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Potassium	3200		29	10	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Selenium	0.57	J	0.58	0.34	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Silver	2.4	B	0.29	0.075	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Sodium	210		58	8.6	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Thallium	0.92		0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1
Zinc	50		1.2	0.51	mg/Kg	☼	12/04/19 17:49	12/05/19 15:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:16	1
Boron	0.094	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Date Collected: 11/22/19 09:32

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 82.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:16	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:16	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:16	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:16	1
Manganese	1.6		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:16	1
Nickel	0.046		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:16	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:16	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:16	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:16	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.014	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:22	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:11	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 08:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.019	0.0064	mg/Kg	☼	12/04/19 13:40	12/05/19 07:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/19 10:28	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Acetone	0.0094	J	0.019	0.0082	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/23/19 15:12	12/04/19 17:06	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/23/19 15:12	12/04/19 17:06	1
Dibromofluoromethane	88		75 - 126	11/23/19 15:12	12/04/19 17:06	1
Toluene-d8 (Surr)	97		75 - 124	11/23/19 15:12	12/04/19 17:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Naphthalene	<0.042		0.042	0.0064	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,4-Dichlorophenol	<0.42		0.42	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Hexachlorocyclopentadiene	<0.84	*	0.84	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2-Methylnaphthalene	0.047	J	0.084	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,4-Dinitrophenol	<0.84	*	0.84	0.74	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Phenanthrene	0.10		0.042	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Benzof[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.024	J	0.042	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Benzo[b]fluoranthene	<0.042		0.042	0.0090	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Benzo[a]pyrene	0.0091	J	0.042	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Benzo[g,h,i]perylene	<0.042		0.042	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 03:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		31 - 166				12/05/19 16:16	12/07/19 03:28	1
Phenol-d5	108		30 - 153				12/05/19 16:16	12/07/19 03:28	1
Nitrobenzene-d5	89		37 - 147				12/05/19 16:16	12/07/19 03:28	1
2-Fluorobiphenyl	90		43 - 145				12/05/19 16:16	12/07/19 03:28	1
2,4,6-Tribromophenol	62		31 - 143				12/05/19 16:16	12/07/19 03:28	1
Terphenyl-d14	96		42 - 157				12/05/19 16:16	12/07/19 03:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.97	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Arsenic	7.5		0.58	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Barium	47		0.58	0.067	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Beryllium	0.68		0.23	0.055	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Boron	21	B	2.9	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Cadmium	0.076	J B	0.12	0.021	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Calcium	56000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 09:32	10
Chromium	18	B	0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Copper	28	B	0.58	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Iron	20000	B	12	6.1	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Lead	14		0.29	0.13	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Magnesium	23000		5.8	2.9	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Manganese	300		0.58	0.085	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Nickel	37		0.58	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Potassium	3500		29	10	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Silver	2.4	B	0.29	0.075	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Sodium	230		58	8.6	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Vanadium	22		0.29	0.069	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1
Zinc	53		1.2	0.51	mg/Kg	☼	12/04/19 17:49	12/05/19 15:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:20	1
Boron	0.12	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:20	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:20	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:20	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:20	1
Manganese	1.8		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:20	1
Nickel	0.038		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:20	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:20	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:20	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:20	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:26	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 08:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0065	mg/Kg	☼	12/04/19 13:40	12/05/19 07:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/19 10:30	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Date Collected: 11/22/19 09:46

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Acetone	0.026		0.020	0.0087	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Trichloroethene	0.00072	J	0.0020	0.00067	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/23/19 15:12	12/04/19 17:31	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/23/19 15:12	12/04/19 17:31	1
Dibromofluoromethane	89		75 - 126	11/23/19 15:12	12/04/19 17:31	1
Toluene-d8 (Surr)	95		75 - 124	11/23/19 15:12	12/04/19 17:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Date Collected: 11/22/19 09:46

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2-Methylnaphthalene	0.038	J	0.083	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,4-Dinitrophenol	<0.83	*	0.83	0.73	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Phenanthrene	0.081		0.041	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Benzof[anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Date Collected: 11/22/19 09:46

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 15:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	75		31 - 166				12/05/19 16:16	12/07/19 15:30	1
Phenol-d5	82		30 - 153				12/05/19 16:16	12/07/19 15:30	1
Nitrobenzene-d5	94		37 - 147				12/05/19 16:16	12/07/19 15:30	1
2-Fluorobiphenyl	84		43 - 145				12/05/19 16:16	12/07/19 15:30	1
2,4,6-Tribromophenol	41		31 - 143				12/05/19 16:16	12/07/19 15:30	1
Terphenyl-d14	99		42 - 157				12/05/19 16:16	12/07/19 15:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Arsenic	6.9		0.61	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Barium	40		0.61	0.069	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Beryllium	0.67		0.24	0.057	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Boron	18	B	3.0	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Cadmium	0.095	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Calcium	54000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 09:36	10
Chromium	17	B	0.61	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Cobalt	14		0.30	0.080	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Copper	26	B	0.61	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Iron	19000	B	12	6.3	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Lead	13		0.30	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Magnesium	23000		6.1	3.0	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Manganese	300		0.61	0.088	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Nickel	36		0.61	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Potassium	3200		30	11	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Selenium	0.69		0.61	0.36	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Silver	2.3	B	0.30	0.078	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Sodium	210		61	9.0	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Thallium	0.78		0.61	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Vanadium	20		0.30	0.072	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1
Zinc	56		1.2	0.53	mg/Kg	☼	12/04/19 17:49	12/05/19 15:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:24	1
Boron	0.15	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:24	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Date Collected: 11/22/19 09:46

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:24	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:24	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:24	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:24	1
Manganese	1.9		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:24	1
Nickel	0.043		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:24	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:24	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:24	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:24	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:38	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00030		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0064	mg/Kg	☼	12/04/19 13:40	12/05/19 07:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/19 10:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Date Collected: 11/22/19 10:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 71.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Acetone	0.012	J	0.020	0.0088	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 17:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/23/19 15:12	12/04/19 17:57	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/23/19 15:12	12/04/19 17:57	1
Dibromofluoromethane	91		75 - 126	11/23/19 15:12	12/04/19 17:57	1
Toluene-d8 (Surr)	97		75 - 124	11/23/19 15:12	12/04/19 17:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.23		0.23	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Bis(2-chloroethyl)ether	<0.23		0.23	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
1,3-Dichlorobenzene	<0.23		0.23	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
1,4-Dichlorobenzene	<0.23		0.23	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Date Collected: 11/22/19 10:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 71.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.23		0.23	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2-Methylphenol	<0.23		0.23	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,2'-oxybis[1-chloropropane]	<0.23		0.23	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
N-Nitrosodi-n-propylamine	<0.093		0.093	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Hexachloroethane	<0.23		0.23	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2-Chlorophenol	<0.23		0.23	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Nitrobenzene	<0.046		0.046	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Bis(2-chloroethoxy)methane	<0.23		0.23	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
1,2,4-Trichlorobenzene	<0.23		0.23	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Isophorone	<0.23		0.23	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,4-Dimethylphenol	<0.46		0.46	0.18	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Hexachlorobutadiene	<0.23		0.23	0.073	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Naphthalene	<0.046		0.046	0.0071	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,4-Dichlorophenol	<0.46		0.46	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4-Chloroaniline	<0.93		0.93	0.22	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,4,6-Trichlorophenol	<0.46		0.46	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,4,5-Trichlorophenol	<0.46		0.46	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Hexachlorocyclopentadiene	<0.93	*	0.93	0.27	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2-Methylnaphthalene	<0.093		0.093	0.0085	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2-Nitroaniline	<0.23		0.23	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2-Chloronaphthalene	<0.23		0.23	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4-Chloro-3-methylphenol	<0.46		0.46	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,6-Dinitrotoluene	<0.23		0.23	0.091	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2-Nitrophenol	<0.46		0.46	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
3-Nitroaniline	<0.46		0.46	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Dimethyl phthalate	<0.23		0.23	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,4-Dinitrophenol	<0.93	*	0.93	0.81	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Acenaphthylene	<0.046		0.046	0.0061	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
2,4-Dinitrotoluene	<0.23		0.23	0.073	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Acenaphthene	<0.046		0.046	0.0083	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Dibenzofuran	<0.23		0.23	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4-Nitrophenol	<0.93		0.93	0.44	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Fluorene	<0.046		0.046	0.0065	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4-Nitroaniline	<0.46		0.46	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4-Bromophenyl phenyl ether	<0.23		0.23	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Hexachlorobenzene	<0.093		0.093	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Diethyl phthalate	<0.23		0.23	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4-Chlorophenyl phenyl ether	<0.23		0.23	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Pentachlorophenol	<0.93		0.93	0.74	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
N-Nitrosodiphenylamine	<0.23		0.23	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
4,6-Dinitro-2-methylphenol	<0.93		0.93	0.37	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Phenanthrene	0.11		0.046	0.0064	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Anthracene	<0.046		0.046	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Carbazole	<0.23		0.23	0.12	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Di-n-butyl phthalate	<0.23		0.23	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Fluoranthene	<0.046		0.046	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Pyrene	<0.046		0.046	0.0092	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Butyl benzyl phthalate	<0.23		0.23	0.088	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Benzof[a]anthracene	<0.046		0.046	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Date Collected: 11/22/19 10:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 71.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.046	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
3,3'-Dichlorobenzidine	<0.23		0.23	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Bis(2-ethylhexyl) phthalate	<0.23		0.23	0.084	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Di-n-octyl phthalate	<0.23		0.23	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Benzo[b]fluoranthene	<0.046		0.046	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Benzo[k]fluoranthene	<0.046		0.046	0.014	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Benzo[a]pyrene	<0.046		0.046	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Indeno[1,2,3-cd]pyrene	<0.046		0.046	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Dibenz(a,h)anthracene	<0.046		0.046	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Benzo[g,h,i]perylene	<0.046		0.046	0.015	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
3 & 4 Methylphenol	<0.23		0.23	0.077	mg/Kg	☼	12/05/19 16:16	12/07/19 20:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	75		31 - 166				12/05/19 16:16	12/07/19 20:42	1
Phenol-d5	79		30 - 153				12/05/19 16:16	12/07/19 20:42	1
Nitrobenzene-d5	90		37 - 147				12/05/19 16:16	12/07/19 20:42	1
2-Fluorobiphenyl	84		43 - 145				12/05/19 16:16	12/07/19 20:42	1
2,4,6-Tribromophenol	72		31 - 143				12/05/19 16:16	12/07/19 20:42	1
Terphenyl-d14	117		42 - 157				12/05/19 16:16	12/07/19 20:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	1.4	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Arsenic	6.6		0.69	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Barium	47		0.69	0.079	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Beryllium	0.87		0.28	0.065	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Boron	22	B	3.5	0.32	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Cadmium	0.10	J B	0.14	0.025	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Calcium	39000		14	2.3	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Chromium	22	B	0.69	0.34	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Cobalt	16		0.35	0.091	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Copper	30	B	0.69	0.19	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Iron	21000	B	14	7.2	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Lead	16		0.35	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Magnesium	24000		6.9	3.4	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Manganese	320		0.69	0.10	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Nickel	44		0.69	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Potassium	4200		35	12	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Selenium	0.52	J	0.69	0.41	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Silver	2.7	B	0.35	0.089	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Sodium	880		69	10	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Thallium	1.2		0.69	0.35	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Vanadium	25		0.35	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1
Zinc	57		1.4	0.61	mg/Kg	☼	12/04/19 17:49	12/05/19 15:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.51		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:28	1
Boron	0.094	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Date Collected: 11/22/19 10:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 71.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:28	1
Cobalt	0.035		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:28	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:28	1
Manganese	2.4		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:28	1
Nickel	0.095		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:28	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:28	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:28	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.014	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:42	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:22	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.022	0.0074	mg/Kg	☼	12/04/19 13:40	12/05/19 07:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 10:36	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Acetone	0.0077	J	0.017	0.0076	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/23/19 15:12	12/04/19 18:23	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/23/19 15:12	12/04/19 18:23	1
Dibromofluoromethane	87		75 - 126	11/23/19 15:12	12/04/19 18:23	1
Toluene-d8 (Surr)	97		75 - 124	11/23/19 15:12	12/04/19 18:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2-Methylnaphthalene	0.026	J	0.083	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Phenanthrene	0.071		0.041	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Pyrene	0.010	J	0.041	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 15:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166				12/05/19 16:16	12/07/19 15:54	1
Phenol-d5	72		30 - 153				12/05/19 16:16	12/07/19 15:54	1
Nitrobenzene-d5	89		37 - 147				12/05/19 16:16	12/07/19 15:54	1
2-Fluorobiphenyl	79		43 - 145				12/05/19 16:16	12/07/19 15:54	1
2,4,6-Tribromophenol	58		31 - 143				12/05/19 16:16	12/07/19 15:54	1
Terphenyl-d14	108		42 - 157				12/05/19 16:16	12/07/19 15:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.65	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Arsenic	8.4		0.62	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Barium	37		0.62	0.070	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Beryllium	0.69		0.25	0.058	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Boron	18	B	3.1	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Cadmium	0.093	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Calcium	59000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 09:40	10
Chromium	17	B	0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Cobalt	14		0.31	0.081	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Copper	31	B	0.62	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Iron	20000	B	12	6.4	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Lead	16		0.31	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Magnesium	25000		6.2	3.1	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Manganese	330		0.62	0.089	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Nickel	39		0.62	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Potassium	3200		31	11	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Selenium	<0.62		0.62	0.36	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Silver	2.2	B	0.31	0.080	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Sodium	230		62	9.1	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Thallium	0.90		0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Vanadium	20		0.31	0.073	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1
Zinc	53		1.2	0.54	mg/Kg	☼	12/04/19 17:49	12/05/19 15:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:33	1
Boron	0.098	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:33	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:33	1
Cobalt	0.019	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:33	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:33	1
Manganese	1.8		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:33	1
Nickel	0.053		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:33	1
Selenium	0.033	J	0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:33	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:33	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:33	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:46	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.019	0.0064	mg/Kg	☼	12/04/19 13:40	12/05/19 07:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/19 10:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,1,2,2-Tetrachloroethane	<0.0031		0.0031	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,1,2-Trichloroethane	<0.0031		0.0031	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,1-Dichloroethane	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,1-Dichloroethene	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,2-Dichloroethane	<0.0079		0.0079	0.0025	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,2-Dichloropropane	<0.0031		0.0031	0.00081	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
1,3-Dichloropropene, Total	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
2-Butanone (MEK)	<0.0079		0.0079	0.0035	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
2-Hexanone	<0.0079		0.0079	0.0025	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
4-Methyl-2-pentanone (MIBK)	<0.0079		0.0079	0.0023	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Acetone	0.068		0.031	0.014	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Benzene	<0.0031		0.0031	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Bromodichloromethane	<0.0031		0.0031	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Bromoform	<0.0031		0.0031	0.00092	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Bromomethane	<0.0079		0.0079	0.0030	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Carbon disulfide	<0.0079		0.0079	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Carbon tetrachloride	<0.0031		0.0031	0.00091	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Chlorobenzene	<0.0031		0.0031	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Chloroethane	<0.0079		0.0079	0.0023	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Chloroform	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Chloromethane	<0.0079		0.0079	0.0032	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
cis-1,2-Dichloroethene	<0.0031		0.0031	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
cis-1,3-Dichloropropene	<0.0031		0.0031	0.00095	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Dibromochloromethane	<0.0031		0.0031	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Ethylbenzene	<0.0031		0.0031	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Methyl tert-butyl ether	<0.0031		0.0031	0.00092	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Methylene Chloride	<0.0079		0.0079	0.0031	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Styrene	<0.0031		0.0031	0.00095	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Tetrachloroethene	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Toluene	<0.0031		0.0031	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
trans-1,2-Dichloroethene	<0.0031		0.0031	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
trans-1,3-Dichloropropene	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Trichloroethene	<0.0031		0.0031	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Vinyl acetate	<0.0079		0.0079	0.0027	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Vinyl chloride	<0.0031		0.0031	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1
Xylenes, Total	<0.0063		0.0063	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/23/19 15:12	12/04/19 18:48	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/23/19 15:12	12/04/19 18:48	1
Dibromofluoromethane	87		75 - 126	11/23/19 15:12	12/04/19 18:48	1
Toluene-d8 (Surr)	95		75 - 124	11/23/19 15:12	12/04/19 18:48	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22		0.22	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
1,3-Dichlorobenzene	<0.22		0.22	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
1,4-Dichlorobenzene	<0.22		0.22	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.22		0.22	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2-Methylphenol	<0.22		0.22	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
N-Nitrosodi-n-propylamine	<0.089		0.089	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Hexachloroethane	<0.22		0.22	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2-Chlorophenol	<0.22		0.22	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Nitrobenzene	<0.044		0.044	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
1,2,4-Trichlorobenzene	<0.22		0.22	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Isophorone	<0.22		0.22	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,4-Dimethylphenol	<0.44		0.44	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Hexachlorobutadiene	<0.22		0.22	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Naphthalene	<0.044		0.044	0.0068	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,4-Dichlorophenol	<0.44		0.44	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4-Chloroaniline	<0.89		0.89	0.21	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,4,6-Trichlorophenol	<0.44		0.44	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,4,5-Trichlorophenol	<0.44		0.44	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Hexachlorocyclopentadiene	<0.89	*	0.89	0.25	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2-Methylnaphthalene	0.026	J	0.089	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2-Nitroaniline	<0.22		0.22	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2-Chloronaphthalene	<0.22		0.22	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4-Chloro-3-methylphenol	<0.44		0.44	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,6-Dinitrotoluene	<0.22		0.22	0.087	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2-Nitrophenol	<0.44		0.44	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
3-Nitroaniline	<0.44		0.44	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Dimethyl phthalate	<0.22		0.22	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,4-Dinitrophenol	<0.89	*	0.89	0.78	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Acenaphthylene	<0.044		0.044	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
2,4-Dinitrotoluene	<0.22		0.22	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Acenaphthene	<0.044		0.044	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Dibenzofuran	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4-Nitrophenol	<0.89		0.89	0.42	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Fluorene	<0.044		0.044	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4-Nitroaniline	<0.44		0.44	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Hexachlorobenzene	<0.089		0.089	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Diethyl phthalate	<0.22		0.22	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Pentachlorophenol	<0.89		0.89	0.71	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
N-Nitrosodiphenylamine	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
4,6-Dinitro-2-methylphenol	<0.89		0.89	0.36	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Phenanthrene	0.095		0.044	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Anthracene	<0.044		0.044	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Di-n-butyl phthalate	<0.22		0.22	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Fluoranthene	<0.044		0.044	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Pyrene	0.015	J	0.044	0.0088	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Butyl benzyl phthalate	<0.22		0.22	0.084	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Benzof[a]anthracene	<0.044		0.044	0.0060	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.044	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Di-n-octyl phthalate	<0.22		0.22	0.072	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Benzo[b]fluoranthene	<0.044		0.044	0.0095	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Benzo[k]fluoranthene	<0.044		0.044	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Benzo[a]pyrene	<0.044		0.044	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Indeno[1,2,3-cd]pyrene	<0.044		0.044	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Dibenz(a,h)anthracene	<0.044		0.044	0.0085	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Benzo[g,h,i]perylene	<0.044		0.044	0.014	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
3 & 4 Methylphenol	<0.22		0.22	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	74		31 - 166				12/05/19 16:16	12/07/19 16:18	1
Phenol-d5	85		30 - 153				12/05/19 16:16	12/07/19 16:18	1
Nitrobenzene-d5	96		37 - 147				12/05/19 16:16	12/07/19 16:18	1
2-Fluorobiphenyl	90		43 - 145				12/05/19 16:16	12/07/19 16:18	1
2,4,6-Tribromophenol	57		31 - 143				12/05/19 16:16	12/07/19 16:18	1
Terphenyl-d14	107		42 - 157				12/05/19 16:16	12/07/19 16:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.75	J	1.3	0.25	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Arsenic	4.7		0.64	0.22	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Barium	47		0.64	0.073	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Beryllium	0.89		0.26	0.060	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Boron	21	B	3.2	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Cadmium	0.074	J B	0.13	0.023	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Calcium	31000		13	2.2	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Chromium	23	B	0.64	0.32	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Cobalt	15		0.32	0.084	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Copper	26	B	0.64	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Iron	20000	B	13	6.6	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Lead	14		0.32	0.15	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Magnesium	20000		6.4	3.2	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Manganese	290		0.64	0.093	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Nickel	42		0.64	0.19	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Potassium	4500		32	11	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Selenium	0.49	J	0.64	0.38	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Silver	2.7	B	0.32	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Sodium	400		64	9.5	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Thallium	1.1		0.64	0.32	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Vanadium	23		0.32	0.075	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1
Zinc	56		1.3	0.56	mg/Kg	☼	12/04/19 17:49	12/05/19 15:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:37	1
Boron	0.12	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:37	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:37	1
Cobalt	0.018	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:37	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:37	1
Manganese	1.9		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:37	1
Nickel	0.049		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:37	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:37	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:37	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.021	0.0070	mg/Kg	☼	12/04/19 13:40	12/05/19 07:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 10:41	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Acetone	0.028		0.018	0.0078	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/23/19 15:12	12/04/19 19:14	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/23/19 15:12	12/04/19 19:14	1
Dibromofluoromethane	88		75 - 126	11/23/19 15:12	12/04/19 19:14	1
Toluene-d8 (Surr)	96		75 - 124	11/23/19 15:12	12/04/19 19:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Hexachlorocyclopentadiene	<0.84	*	0.84	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2-Methylnaphthalene	0.040	J	0.084	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,4-Dinitrophenol	<0.84	*	0.84	0.73	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Pentachlorophenol	<0.84		0.84	0.66	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Phenanthrene	0.070		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	71		31 - 166	12/05/19 16:16	12/07/19 16:42	1
Phenol-d5	85		30 - 153	12/05/19 16:16	12/07/19 16:42	1
Nitrobenzene-d5	91		37 - 147	12/05/19 16:16	12/07/19 16:42	1
2-Fluorobiphenyl	87		43 - 145	12/05/19 16:16	12/07/19 16:42	1
2,4,6-Tribromophenol	61		31 - 143	12/05/19 16:16	12/07/19 16:42	1
Terphenyl-d14	114		42 - 157	12/05/19 16:16	12/07/19 16:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Arsenic	6.9		0.60	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Barium	40		0.60	0.068	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Beryllium	0.70		0.24	0.056	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Boron	17	B	3.0	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Cadmium	0.075	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Calcium	57000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 09:44	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Copper	25	B	0.60	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Iron	19000	B	12	6.2	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Lead	13		0.30	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Magnesium	23000		6.0	3.0	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Manganese	310		0.60	0.087	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Nickel	35		0.60	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Potassium	3000		30	11	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Selenium	0.70		0.60	0.35	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Silver	2.2	B	0.30	0.077	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Sodium	190		60	8.9	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Thallium	0.85		0.60	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1
Zinc	49		1.2	0.53	mg/Kg	☼	12/04/19 17:49	12/05/19 15:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:50	1
Boron	0.11	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:50	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:50	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:50	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:50	1
Manganese	1.5		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:50	1
Nickel	0.040		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:50	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:50	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:50	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:50	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.015	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:55	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:41	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0063	mg/Kg	☼	12/04/19 13:40	12/05/19 07:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/19 10:44	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Date Collected: 11/22/19 11:20

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/23/19 15:12	12/04/19 12:32	1
4-Bromofluorobenzene (Surr)	110		75 - 131	11/23/19 15:12	12/04/19 12:32	1
Dibromofluoromethane	97		75 - 126	11/23/19 15:12	12/04/19 12:32	1
Toluene-d8 (Surr)	103		75 - 124	11/23/19 15:12	12/04/19 12:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Date Collected: 11/22/19 11:20

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Hexachlorocyclopentadiene	<0.85	*	0.85	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2-Methylnaphthalene	0.033	J	0.085	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,4-Dinitrophenol	<0.85	*	0.85	0.74	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Phenanthrene	0.070		0.042	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Pyrene	0.0096	J	0.042	0.0083	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Benzof[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Date Collected: 11/22/19 11:20

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				12/05/19 16:16	12/07/19 17:06	1
Phenol-d5	79		30 - 153				12/05/19 16:16	12/07/19 17:06	1
Nitrobenzene-d5	93		37 - 147				12/05/19 16:16	12/07/19 17:06	1
2-Fluorobiphenyl	90		43 - 145				12/05/19 16:16	12/07/19 17:06	1
2,4,6-Tribromophenol	54		31 - 143				12/05/19 16:16	12/07/19 17:06	1
Terphenyl-d14	117		42 - 157				12/05/19 16:16	12/07/19 17:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.93	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Arsenic	7.3		0.62	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Barium	42		0.62	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Beryllium	0.63		0.25	0.058	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Boron	19	B	3.1	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Cadmium	0.089	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Calcium	65000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 10:57	10
Chromium	17	B	0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Cobalt	14		0.31	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Copper	27	B	0.62	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Iron	19000	B	12	6.5	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Lead	14		0.31	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Magnesium	28000		6.2	3.1	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Manganese	300		0.62	0.090	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Nickel	36		0.62	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Potassium	3200		31	11	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Selenium	0.54	J	0.62	0.37	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Silver	2.3	B	0.31	0.080	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Sodium	210		62	9.2	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Thallium	0.72		0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Vanadium	20		0.31	0.074	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1
Zinc	57		1.2	0.55	mg/Kg	☼	12/04/19 17:49	12/05/19 15:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:54	1
Boron	0.13	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Date Collected: 11/22/19 11:20

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:54	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:54	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:54	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:54	1
Manganese	1.7		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:54	1
Nickel	0.040		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:54	1
Selenium	0.026	J	0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:54	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:54	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:59	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:45	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0064	mg/Kg	☼	12/04/19 13:40	12/05/19 07:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/02/19 10:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Date Collected: 11/22/19 11:26

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/23/19 15:12	12/04/19 12:57	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/23/19 15:12	12/04/19 12:57	1
Dibromofluoromethane	96		75 - 126	11/23/19 15:12	12/04/19 12:57	1
Toluene-d8 (Surr)	101		75 - 124	11/23/19 15:12	12/04/19 12:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Date Collected: 11/22/19 11:26

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2-Methylnaphthalene	0.036	J	0.083	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,4-Dinitrophenol	<0.83	*	0.83	0.72	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Phenanthrene	0.070		0.041	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Pyrene	0.014	J	0.041	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Date Collected: 11/22/19 11:26

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 17:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				12/05/19 16:16	12/07/19 17:30	1
Phenol-d5	78		30 - 153				12/05/19 16:16	12/07/19 17:30	1
Nitrobenzene-d5	87		37 - 147				12/05/19 16:16	12/07/19 17:30	1
2-Fluorobiphenyl	83		43 - 145				12/05/19 16:16	12/07/19 17:30	1
2,4,6-Tribromophenol	56		31 - 143				12/05/19 16:16	12/07/19 17:30	1
Terphenyl-d14	114		42 - 157				12/05/19 16:16	12/07/19 17:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Arsenic	8.8		0.59	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Barium	38		0.59	0.067	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Beryllium	0.65		0.23	0.055	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Boron	16	B	2.9	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Cadmium	0.080	J B	0.12	0.021	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Calcium	57000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 11:01	10
Chromium	17	B	0.59	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Cobalt	14		0.29	0.077	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Copper	26	B	0.59	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Iron	22000	B	12	6.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Lead	15		0.29	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Manganese	320		0.59	0.085	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Potassium	2900		29	10	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Silver	2.0	B	0.29	0.075	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Sodium	200		59	8.7	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Thallium	0.82		0.59	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Vanadium	19		0.29	0.069	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1
Zinc	52		1.2	0.51	mg/Kg	☼	12/04/19 17:49	12/05/19 16:07	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 10:59	1
Boron	0.13	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 10:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Date Collected: 11/22/19 11:26

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 10:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:59	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:59	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 10:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 10:59	1
Manganese	1.7		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:59	1
Nickel	0.039		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 10:59	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 10:59	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 10:59	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.039		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:03	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.019	0.0062	mg/Kg	☼	12/04/19 13:40	12/05/19 08:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/19 10:52	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,2-Dichloropropane	<0.0016		0.0016	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Bromodichloromethane	<0.0016		0.0016	0.00034	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 13:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	11/23/19 15:12	12/04/19 13:23	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/23/19 15:12	12/04/19 13:23	1
Dibromofluoromethane	99		75 - 126	11/23/19 15:12	12/04/19 13:23	1
Toluene-d8 (Surr)	102		75 - 124	11/23/19 15:12	12/04/19 13:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Hexachlorocyclopentadiene	<0.80	*	0.80	0.23	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2-Methylnaphthalene	0.024	J	0.080	0.0073	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,4-Dinitrophenol	<0.80	*	0.80	0.70	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Phenanthrene	0.12		0.039	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Fluoranthene	0.042		0.039	0.0073	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Pyrene	0.072		0.039	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Benzo[a]anthracene	0.032	J	0.039	0.0053	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.057		0.039	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 21:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				12/05/19 16:16	12/07/19 21:06	1
Phenol-d5	75		30 - 153				12/05/19 16:16	12/07/19 21:06	1
Nitrobenzene-d5	84		37 - 147				12/05/19 16:16	12/07/19 21:06	1
2-Fluorobiphenyl	78		43 - 145				12/05/19 16:16	12/07/19 21:06	1
2,4,6-Tribromophenol	75		31 - 143				12/05/19 16:16	12/07/19 21:06	1
Terphenyl-d14	125		42 - 157				12/05/19 16:16	12/07/19 21:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.1	0.22	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Arsenic	8.6		0.56	0.19	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Barium	29		0.56	0.064	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Beryllium	0.71		0.23	0.053	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Boron	15	B	2.8	0.26	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Cadmium	0.12	B	0.11	0.020	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Calcium	32000		11	1.9	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Chromium	17	B	0.56	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Cobalt	16		0.28	0.074	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Copper	35	B	0.56	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Iron	20000	B	11	5.9	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Lead	18		0.28	0.13	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Magnesium	20000		5.6	2.8	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Manganese	290		0.56	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Nickel	43		0.56	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Potassium	2900		28	10	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Selenium	0.85		0.56	0.33	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Silver	2.0	B	0.28	0.073	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Sodium	730		56	8.4	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Thallium	1.1		0.56	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Vanadium	19		0.28	0.067	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1
Zinc	54		1.1	0.50	mg/Kg	☼	12/04/19 17:49	12/05/19 16:11	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:03	1
Boron	0.095	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:03	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:03	1
Cobalt	0.056		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:03	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:03	1
Manganese	2.3		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:03	1
Nickel	0.12		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:03	1
Selenium	0.027 J		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:03	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:03	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:03	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.031		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:07	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:52	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.018	0.0060	mg/Kg	☼	12/04/19 13:40	12/05/19 08:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/19 10:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Date Collected: 11/22/19 12:43

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0030		0.0030	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,1,2,2-Tetrachloroethane	<0.0030		0.0030	0.00096	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,1,2-Trichloroethane	<0.0030		0.0030	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,1-Dichloroethane	<0.0030		0.0030	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,1-Dichloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,2-Dichloroethane	<0.0075		0.0075	0.0023	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,2-Dichloropropane	<0.0030		0.0030	0.00078	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
1,3-Dichloropropene, Total	<0.0030		0.0030	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
2-Butanone (MEK)	<0.0075		0.0075	0.0033	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
2-Hexanone	<0.0075		0.0075	0.0023	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
4-Methyl-2-pentanone (MIBK)	<0.0075		0.0075	0.0022	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Acetone	0.015	J	0.030	0.013	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Benzene	<0.0030		0.0030	0.00077	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Bromodichloromethane	<0.0030		0.0030	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Bromoform	<0.0030		0.0030	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Bromomethane	<0.0075		0.0075	0.0028	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Carbon disulfide	<0.0075		0.0075	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Carbon tetrachloride	<0.0030		0.0030	0.00087	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Chlorobenzene	<0.0030		0.0030	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Chloroethane	<0.0075		0.0075	0.0022	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Chloroform	<0.0030		0.0030	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Chloromethane	<0.0075		0.0075	0.0030	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
cis-1,2-Dichloroethene	<0.0030		0.0030	0.00084	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
cis-1,3-Dichloropropene	<0.0030		0.0030	0.00091	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Dibromochloromethane	<0.0030		0.0030	0.00098	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Ethylbenzene	<0.0030		0.0030	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Methyl tert-butyl ether	<0.0030		0.0030	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Methylene Chloride	<0.0075		0.0075	0.0030	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Styrene	<0.0030		0.0030	0.00091	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Tetrachloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Toluene	<0.0030		0.0030	0.00076	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
trans-1,2-Dichloroethene	<0.0030		0.0030	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
trans-1,3-Dichloropropene	<0.0030		0.0030	0.0011	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Trichloroethene	<0.0030		0.0030	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Vinyl acetate	<0.0075		0.0075	0.0026	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Vinyl chloride	<0.0030		0.0030	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1
Xylenes, Total	0.0010	J	0.0060	0.00096	mg/Kg	☼	11/23/19 15:12	12/04/19 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/23/19 15:12	12/04/19 13:49	1
4-Bromofluorobenzene (Surr)	109		75 - 131	11/23/19 15:12	12/04/19 13:49	1
Dibromofluoromethane	98		75 - 126	11/23/19 15:12	12/04/19 13:49	1
Toluene-d8 (Surr)	103		75 - 124	11/23/19 15:12	12/04/19 13:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22		0.22	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
1,3-Dichlorobenzene	<0.22		0.22	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
1,4-Dichlorobenzene	<0.22		0.22	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Date Collected: 11/22/19 12:43

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.22		0.22	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2-Methylphenol	<0.22		0.22	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
N-Nitrosodi-n-propylamine	<0.090		0.090	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Hexachloroethane	<0.22		0.22	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2-Chlorophenol	<0.22		0.22	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Nitrobenzene	<0.044		0.044	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
1,2,4-Trichlorobenzene	<0.22		0.22	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Isophorone	<0.22		0.22	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,4-Dimethylphenol	<0.44		0.44	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Hexachlorobutadiene	<0.22		0.22	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Naphthalene	<0.044		0.044	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,4-Dichlorophenol	<0.44		0.44	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4-Chloroaniline	<0.90		0.90	0.21	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,4,6-Trichlorophenol	<0.44		0.44	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,4,5-Trichlorophenol	<0.44		0.44	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Hexachlorocyclopentadiene	<0.90	*	0.90	0.26	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2-Methylnaphthalene	0.038	J	0.090	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2-Nitroaniline	<0.22		0.22	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2-Chloronaphthalene	<0.22		0.22	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4-Chloro-3-methylphenol	<0.44		0.44	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,6-Dinitrotoluene	<0.22		0.22	0.088	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2-Nitrophenol	<0.44		0.44	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
3-Nitroaniline	<0.44		0.44	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Dimethyl phthalate	<0.22		0.22	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,4-Dinitrophenol	<0.90	*	0.90	0.78	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Acenaphthylene	<0.044		0.044	0.0059	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
2,4-Dinitrotoluene	<0.22		0.22	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Acenaphthene	<0.044		0.044	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Dibenzofuran	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4-Nitrophenol	<0.90		0.90	0.42	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Fluorene	<0.044		0.044	0.0063	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4-Nitroaniline	<0.44		0.44	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Hexachlorobenzene	<0.090		0.090	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Diethyl phthalate	<0.22		0.22	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Pentachlorophenol	<0.90		0.90	0.71	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
N-Nitrosodiphenylamine	<0.22		0.22	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
4,6-Dinitro-2-methylphenol	<0.90		0.90	0.36	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Phenanthrene	0.15		0.044	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Anthracene	<0.044		0.044	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Di-n-butyl phthalate	<0.22		0.22	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Fluoranthene	<0.044		0.044	0.0083	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Pyrene	0.023	J	0.044	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Butyl benzyl phthalate	<0.22		0.22	0.085	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Benzof[a]anthracene	<0.044		0.044	0.0060	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Date Collected: 11/22/19 12:43

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.039	J	0.044	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Di-n-octyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Benzo[b]fluoranthene	<0.044		0.044	0.0096	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Benzo[k]fluoranthene	<0.044		0.044	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Benzo[a]pyrene	<0.044		0.044	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Indeno[1,2,3-cd]pyrene	<0.044		0.044	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Dibenz(a,h)anthracene	<0.044		0.044	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Benzo[g,h,i]perylene	<0.044		0.044	0.014	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
3 & 4 Methylphenol	<0.22		0.22	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 21:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	71		31 - 166				12/05/19 16:16	12/07/19 21:30	1
Phenol-d5	77		30 - 153				12/05/19 16:16	12/07/19 21:30	1
Nitrobenzene-d5	89		37 - 147				12/05/19 16:16	12/07/19 21:30	1
2-Fluorobiphenyl	90		43 - 145				12/05/19 16:16	12/07/19 21:30	1
2,4,6-Tribromophenol	55		31 - 143				12/05/19 16:16	12/07/19 21:30	1
Terphenyl-d14	123		42 - 157				12/05/19 16:16	12/07/19 21:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Arsenic	6.1		0.62	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Barium	49		0.62	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Beryllium	0.80		0.25	0.058	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Boron	20	B	3.1	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Cadmium	0.070	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Calcium	50000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 11:05	10
Chromium	22	B	0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Cobalt	15		0.31	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Copper	27	B	0.62	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Iron	21000	B	12	6.5	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Lead	15		0.31	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Manganese	330		0.62	0.090	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Nickel	42		0.62	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Potassium	4000		31	11	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Selenium	0.54	J	0.62	0.37	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Silver	2.7	B	0.31	0.080	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Sodium	250		62	9.2	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Thallium	1.0		0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Vanadium	23		0.31	0.074	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1
Zinc	54		1.2	0.55	mg/Kg	☼	12/04/19 17:49	12/05/19 16:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.79		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:07	1
Boron	0.12	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Date Collected: 11/22/19 12:43

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:07	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:07	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:07	1
Iron	0.21	J	0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:07	1
Manganese	2.1		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:07	1
Nickel	0.063		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:07	1
Selenium	0.022	J	0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:07	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:07	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:07	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:11	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 18:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 18:56	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	J	0.021	0.0068	mg/Kg	☼	12/04/19 13:40	12/05/19 08:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			12/02/19 10:58	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Acetone	0.038		0.017	0.0074	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/23/19 15:12	12/04/19 14:15	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/23/19 15:12	12/04/19 14:15	1
Dibromofluoromethane	94		75 - 126	11/23/19 15:12	12/04/19 14:15	1
Toluene-d8 (Surr)	106		75 - 124	11/23/19 15:12	12/04/19 14:15	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2-Methylnaphthalene	0.036	J	0.083	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,4-Dinitrophenol	<0.83	*	0.83	0.73	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Phenanthrene	0.082		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Pyrene	0.012	J	0.041	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.023	J	0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		31 - 166				12/05/19 16:16	12/07/19 17:54	1
Phenol-d5	77		30 - 153				12/05/19 16:16	12/07/19 17:54	1
Nitrobenzene-d5	80		37 - 147				12/05/19 16:16	12/07/19 17:54	1
2-Fluorobiphenyl	73		43 - 145				12/05/19 16:16	12/07/19 17:54	1
2,4,6-Tribromophenol	67		31 - 143				12/05/19 16:16	12/07/19 17:54	1
Terphenyl-d14	114		42 - 157				12/05/19 16:16	12/07/19 17:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Arsenic	7.7		0.59	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Barium	36		0.59	0.067	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Beryllium	0.57		0.24	0.055	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Boron	14	B	2.9	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Cadmium	0.083	J B	0.12	0.021	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Calcium	55000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 11:09	10
Chromium	16	B	0.59	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Cobalt	14		0.29	0.077	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Copper	33	B	0.59	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Iron	19000	B	12	6.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Lead	15		0.29	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Magnesium	24000		5.9	2.9	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Manganese	320		0.59	0.085	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Potassium	2600		29	10	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Selenium	0.85		0.59	0.35	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Silver	2.0	B	0.29	0.076	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Sodium	170		59	8.7	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Thallium	0.99		0.59	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Vanadium	18		0.29	0.070	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1
Zinc	52		1.2	0.52	mg/Kg	☼	12/04/19 17:49	12/05/19 16:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:11	1
Boron	0.10	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:11	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:11	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:11	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:11	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:11	1
Manganese	1.7		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:11	1
Nickel	0.041		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:11	1
Selenium	0.035	J	0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:11	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:11	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:11	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.018	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 19:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.021	0.0068	mg/Kg	☼	12/04/19 13:40	12/05/19 08:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/19 11:01	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Date Collected: 11/22/19 12:54

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/23/19 15:12	12/04/19 14:40	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/23/19 15:12	12/04/19 14:40	1
Dibromofluoromethane	95		75 - 126	11/23/19 15:12	12/04/19 14:40	1
Toluene-d8 (Surr)	101		75 - 124	11/23/19 15:12	12/04/19 14:40	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Date Collected: 11/22/19 12:54

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Hexachlorocyclopentadiene	<0.84	*	0.84	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2-Methylnaphthalene	0.051	J	0.084	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,4-Dinitrophenol	<0.84	*	0.84	0.73	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Phenanthrene	0.084		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Date Collected: 11/22/19 12:54

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	74		31 - 166				12/05/19 16:16	12/07/19 18:18	1
Phenol-d5	79		30 - 153				12/05/19 16:16	12/07/19 18:18	1
Nitrobenzene-d5	94		37 - 147				12/05/19 16:16	12/07/19 18:18	1
2-Fluorobiphenyl	86		43 - 145				12/05/19 16:16	12/07/19 18:18	1
2,4,6-Tribromophenol	68		31 - 143				12/05/19 16:16	12/07/19 18:18	1
Terphenyl-d14	112		42 - 157				12/05/19 16:16	12/07/19 18:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Arsenic	7.7		0.62	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Barium	41		0.62	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Beryllium	0.67		0.25	0.058	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Boron	19	B	3.1	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Cadmium	0.069	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Calcium	54000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 11:13	10
Chromium	18	B	0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Cobalt	14		0.31	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Copper	28	B	0.62	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Iron	20000	B	12	6.5	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Lead	15		0.31	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Manganese	320		0.62	0.090	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Nickel	38		0.62	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Potassium	3400		31	11	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Selenium	0.59	J	0.62	0.37	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Silver	2.3	B	0.31	0.080	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Sodium	200		62	9.2	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Thallium	0.94		0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Vanadium	21		0.31	0.073	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1
Zinc	53		1.2	0.55	mg/Kg	☼	12/04/19 17:49	12/05/19 16:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.54		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:16	1
Boron	0.12	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Date Collected: 11/22/19 12:54

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:16	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:16	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:16	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:16	1
Manganese	1.7		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:16	1
Nickel	0.040		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:16	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:16	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:16	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:16	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.027		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:27	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 19:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:04	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.018	0.0060	mg/Kg	☼	12/04/19 13:40	12/05/19 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 11:04	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Date Collected: 11/22/19 13:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Trichloroethene	0.00065	J	0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/23/19 15:12	12/04/19 15:06	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/23/19 15:12	12/04/19 15:06	1
Dibromofluoromethane	95		75 - 126	11/23/19 15:12	12/04/19 15:06	1
Toluene-d8 (Surr)	103		75 - 124	11/23/19 15:12	12/04/19 15:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.091	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Date Collected: 11/22/19 13:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Hexachlorocyclopentadiene	<0.82	*	0.82	0.23	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2-Methylnaphthalene	0.022	J	0.082	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Phenanthrene	0.065		0.040	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Date Collected: 11/22/19 13:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 13:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		31 - 166				12/05/19 16:16	12/07/19 13:06	1
Phenol-d5	67		30 - 153				12/05/19 16:16	12/07/19 13:06	1
Nitrobenzene-d5	74		37 - 147				12/05/19 16:16	12/07/19 13:06	1
2-Fluorobiphenyl	70		43 - 145				12/05/19 16:16	12/07/19 13:06	1
2,4,6-Tribromophenol	66		31 - 143				12/05/19 16:16	12/07/19 13:06	1
Terphenyl-d14	104		42 - 157				12/05/19 16:16	12/07/19 13:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Arsenic	7.2		0.61	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Barium	38		0.61	0.069	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Beryllium	0.58		0.24	0.057	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Boron	17	B	3.0	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Cadmium	0.098	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Calcium	58000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 11:17	10
Chromium	16	B	0.61	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Copper	25	B	0.61	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Iron	19000	B	12	6.3	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Lead	14		0.30	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Magnesium	25000		6.1	3.0	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Manganese	310		0.61	0.088	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Nickel	35		0.61	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Potassium	2900		30	11	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Selenium	0.68		0.61	0.36	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Silver	2.1	B	0.30	0.078	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Sodium	210		61	9.0	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Thallium	0.81		0.61	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Vanadium	19		0.30	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1
Zinc	54		1.2	0.53	mg/Kg	☼	12/04/19 17:49	12/05/19 16:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.55		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:20	1
Boron	0.12	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:20	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Date Collected: 11/22/19 13:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:20	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:20	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:20	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:20	1
Manganese	1.7		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:20	1
Nickel	0.042		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:20	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:20	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:20	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:20	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.031		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:32	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 19:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.020	0.0065	mg/Kg	☼	12/04/19 13:40	12/05/19 08:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/19 11:06	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 76.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Acetone	0.0095	J	0.019	0.0084	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/23/19 15:12	12/04/19 15:32	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/23/19 15:12	12/04/19 15:32	1
Dibromofluoromethane	97		75 - 126	11/23/19 15:12	12/04/19 15:32	1
Toluene-d8 (Surr)	105		75 - 124	11/23/19 15:12	12/04/19 15:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22		0.22	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 76.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
N-Nitrosodi-n-propylamine	<0.087		0.087	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Hexachloroethane	<0.22		0.22	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2-Chlorophenol	<0.22		0.22	0.074	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
1,2,4-Trichlorobenzene	<0.22		0.22	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Isophorone	<0.22		0.22	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Naphthalene	<0.043		0.043	0.0066	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4-Chloroaniline	<0.87		0.87	0.20	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,4,5-Trichlorophenol	<0.43		0.43	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Hexachlorocyclopentadiene	<0.87 *		0.87	0.25	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2-Methylnaphthalene	<0.087		0.087	0.0079	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,4-Dinitrophenol	<0.87 *		0.87	0.76	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
2,4-Dinitrotoluene	<0.22		0.22	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Acenaphthene	<0.043		0.043	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4-Nitrophenol	<0.87		0.87	0.41	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Fluorene	<0.043		0.043	0.0061	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Hexachlorobenzene	<0.087		0.087	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Pentachlorophenol	<0.87		0.87	0.69	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
4,6-Dinitro-2-methylphenol	<0.87		0.87	0.35	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Phenanthrene	0.046		0.043	0.0060	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Anthracene	<0.043		0.043	0.0072	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Fluoranthene	<0.043		0.043	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Pyrene	<0.043		0.043	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Benzof[anthracene	<0.043		0.043	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 76.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Di-n-octyl phthalate	<0.22		0.22	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Benzo[b]fluoranthene	<0.043		0.043	0.0093	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Benzo[a]pyrene	<0.043		0.043	0.0084	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Indeno[1,2,3-cd]pyrene	<0.043		0.043	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0083	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	12/05/19 16:16	12/07/19 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		31 - 166				12/05/19 16:16	12/07/19 13:30	1
Phenol-d5	73		30 - 153				12/05/19 16:16	12/07/19 13:30	1
Nitrobenzene-d5	91		37 - 147				12/05/19 16:16	12/07/19 13:30	1
2-Fluorobiphenyl	84		43 - 145				12/05/19 16:16	12/07/19 13:30	1
2,4,6-Tribromophenol	84		31 - 143				12/05/19 16:16	12/07/19 13:30	1
Terphenyl-d14	109		42 - 157				12/05/19 16:16	12/07/19 13:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.3	0.25	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Arsenic	7.9		0.63	0.22	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Barium	43		0.63	0.072	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Beryllium	0.81		0.25	0.059	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Boron	19	B	3.2	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Cadmium	0.053	J B	0.13	0.023	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Calcium	30000		13	2.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Chromium	20	B	0.63	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Cobalt	16		0.32	0.083	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Copper	31	B	0.63	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Iron	21000	B	13	6.6	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Lead	17		0.32	0.15	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Magnesium	20000		6.3	3.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Manganese	310		0.63	0.092	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Nickel	44		0.63	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Potassium	3800		32	11	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Selenium	<0.63		0.63	0.37	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Silver	2.4	B	0.32	0.081	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Sodium	870		63	9.3	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Thallium	1.3		0.63	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Vanadium	22		0.32	0.074	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1
Zinc	50		1.3	0.55	mg/Kg	☼	12/04/19 17:49	12/05/19 16:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.51		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:24	1
Boron	0.11	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 76.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:24	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:24	1
Cobalt	0.043		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:24	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:24	1
Manganese	2.2		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:24	1
Nickel	0.085		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:24	1
Selenium	0.040 J		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:24	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:24	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:24	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:36	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 19:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:11	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.021	0.0069	mg/Kg	☼	12/04/19 13:40	12/05/19 08:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/19 11:09	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Date Collected: 11/22/19 14:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 81.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/23/19 15:12	12/04/19 15:57	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/23/19 15:12	12/04/19 15:57	1
Dibromofluoromethane	98		75 - 126	11/23/19 15:12	12/04/19 15:57	1
Toluene-d8 (Surr)	101		75 - 124	11/23/19 15:12	12/04/19 15:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Date Collected: 11/22/19 14:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Hexachlorocyclopentadiene	<0.81	*	0.81	0.23	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2-Methylnaphthalene	0.037	J	0.081	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,4-Dinitrophenol	<0.81	*	0.81	0.71	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Phenanthrene	0.077		0.040	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Date Collected: 11/22/19 14:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				12/05/19 16:16	12/07/19 13:54	1
Phenol-d5	78		30 - 153				12/05/19 16:16	12/07/19 13:54	1
Nitrobenzene-d5	90		37 - 147				12/05/19 16:16	12/07/19 13:54	1
2-Fluorobiphenyl	88		43 - 145				12/05/19 16:16	12/07/19 13:54	1
2,4,6-Tribromophenol	60		31 - 143				12/05/19 16:16	12/07/19 13:54	1
Terphenyl-d14	112		42 - 157				12/05/19 16:16	12/07/19 13:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.2	0.22	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Arsenic	7.7		0.58	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Barium	20		0.58	0.066	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Beryllium	0.44		0.23	0.054	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Boron	13	B	2.9	0.27	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Cadmium	1.6	B	0.12	0.021	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Calcium	95000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 11:21	10
Chromium	10	B	0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Cobalt	15		0.29	0.076	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Copper	36	B	0.58	0.16	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Iron	20000	B	12	6.0	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Lead	18		0.29	0.13	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Magnesium	53000		58	29	mg/Kg	☼	12/04/19 17:49	12/06/19 11:21	10
Manganese	980		0.58	0.084	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Nickel	39		0.58	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Potassium	2100		29	10	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Selenium	0.95		0.58	0.34	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Silver	1.2	B	0.29	0.075	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Sodium	160		58	8.5	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Thallium	0.49	J	0.58	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Vanadium	13		0.29	0.068	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1
Zinc	370		1.2	0.51	mg/Kg	☼	12/04/19 17:49	12/05/19 16:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:29	1
Boron	0.10	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Date Collected: 11/22/19 14:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 81.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:29	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:29	1
Cobalt	0.024	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:29	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:29	1
Manganese	2.0		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:29	1
Nickel	0.059		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:29	1
Selenium	0.039	J	0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:29	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:29	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:29	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.025		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:40	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 19:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0063	mg/Kg	☼	12/04/19 13:40	12/05/19 08:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 11:12	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Acetone	0.022		0.017	0.0072	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Vinyl acetate	<0.0042		0.0042	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/23/19 15:12	12/04/19 16:22	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/23/19 15:12	12/04/19 16:22	1
Dibromofluoromethane	96		75 - 126	11/23/19 15:12	12/04/19 16:22	1
Toluene-d8 (Surr)	101		75 - 124	11/23/19 15:12	12/04/19 16:22	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2-Methylnaphthalene	0.043	J	0.083	0.0076	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,4-Dinitrophenol	<0.83	*	0.83	0.73	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Phenanthrene	0.069		0.041	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Benzof[anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 16:16	12/07/19 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				12/05/19 16:16	12/07/19 14:18	1
Phenol-d5	82		30 - 153				12/05/19 16:16	12/07/19 14:18	1
Nitrobenzene-d5	92		37 - 147				12/05/19 16:16	12/07/19 14:18	1
2-Fluorobiphenyl	87		43 - 145				12/05/19 16:16	12/07/19 14:18	1
2,4,6-Tribromophenol	68		31 - 143				12/05/19 16:16	12/07/19 14:18	1
Terphenyl-d14	107		42 - 157				12/05/19 16:16	12/07/19 14:18	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.87	J	1.2	0.23	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Arsenic	7.6		0.60	0.20	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Barium	38		0.60	0.068	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Beryllium	0.67		0.24	0.056	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Boron	17	B	3.0	0.28	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Cadmium	0.15	B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Calcium	63000		120	20	mg/Kg	☼	12/04/19 17:49	12/06/19 11:25	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Copper	26	B	0.60	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Iron	19000	B	12	6.2	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Lead	14		0.30	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Magnesium	27000		6.0	3.0	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Manganese	310		0.60	0.087	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Nickel	36		0.60	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Potassium	3100		30	11	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Selenium	0.43	J	0.60	0.35	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Silver	2.2	B	0.30	0.077	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Sodium	190		60	8.9	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Thallium	0.71		0.60	0.30	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1
Zinc	59		1.2	0.53	mg/Kg	☼	12/04/19 17:49	12/05/19 16:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67	F1	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:41	1
Boron	0.16	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:41	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:41	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:41	1
Manganese	1.8	F1	0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:41	1
Nickel	0.045		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:41	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:41	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:44	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/06/19 13:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0067	mg/Kg	☼	12/04/19 13:40	12/05/19 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/19 11:15	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Vinyl acetate	<0.0045		0.0045	0.0015	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/23/19 15:12	12/04/19 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/23/19 15:12	12/04/19 16:48	1
4-Bromofluorobenzene (Surr)	108		75 - 131	11/23/19 15:12	12/04/19 16:48	1
Dibromofluoromethane	97		75 - 126	11/23/19 15:12	12/04/19 16:48	1
Toluene-d8 (Surr)	104		75 - 124	11/23/19 15:12	12/04/19 16:48	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Hexachlorocyclopentadiene	<0.85	*	0.85	0.24	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2-Methylnaphthalene	0.030	J	0.085	0.0077	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,4-Dinitrophenol	<0.85	*	0.85	0.74	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Phenanthrene	0.046		0.042	0.0058	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Benzof[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.011	J	0.042	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 16:16	12/07/19 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	73		31 - 166				12/05/19 16:16	12/07/19 14:42	1
Phenol-d5	82		30 - 153				12/05/19 16:16	12/07/19 14:42	1
Nitrobenzene-d5	91		37 - 147				12/05/19 16:16	12/07/19 14:42	1
2-Fluorobiphenyl	84		43 - 145				12/05/19 16:16	12/07/19 14:42	1
2,4,6-Tribromophenol	61		31 - 143				12/05/19 16:16	12/07/19 14:42	1
Terphenyl-d14	110		42 - 157				12/05/19 16:16	12/07/19 14:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J	1.2	0.24	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Arsenic	9.7		0.62	0.21	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Barium	42		0.62	0.071	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Beryllium	0.66		0.25	0.058	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Boron	18	B	3.1	0.29	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Cadmium	0.085	J B	0.12	0.022	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Calcium	57000		120	21	mg/Kg	☼	12/04/19 17:49	12/06/19 11:29	10
Chromium	18	B	0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Cobalt	14		0.31	0.082	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Copper	27	B	0.62	0.17	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Iron	20000	B	12	6.5	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Lead	15		0.31	0.14	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Manganese	310		0.62	0.091	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Nickel	39		0.62	0.18	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Potassium	3100		31	11	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Selenium	<0.62		0.62	0.37	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Silver	2.1	B	0.31	0.081	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Sodium	200		62	9.2	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Thallium	0.92		0.62	0.31	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Vanadium	21		0.31	0.074	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1
Zinc	52		1.2	0.55	mg/Kg	☼	12/04/19 17:49	12/05/19 16:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 12:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 12:03	1
Boron	0.11	J	0.50	0.050	mg/L		12/04/19 14:45	12/05/19 12:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 12:03	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 12:03	1
Cobalt	0.032		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 12:03	1
Iron	0.33	J	0.40	0.20	mg/L		12/04/19 14:45	12/05/19 12:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 12:03	1
Manganese	3.8		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 12:03	1
Nickel	0.059		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 12:03	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 12:03	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 12:03	1
Zinc	0.046	J	0.50	0.020	mg/L		12/04/19 14:45	12/05/19 12:03	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.020	J	0.025	0.010	mg/L		12/05/19 08:07	12/06/19 05:48	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/06/19 14:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0063	mg/Kg	☼	12/04/19 13:40	12/05/19 08:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 11:20	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Date Collected: 11/22/19 14:18

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	11/23/19 15:12	12/04/19 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/23/19 15:12	12/04/19 17:13	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/23/19 15:12	12/04/19 17:13	1
Dibromofluoromethane	95		75 - 126	11/23/19 15:12	12/04/19 17:13	1
Toluene-d8 (Surr)	105		75 - 124	11/23/19 15:12	12/04/19 17:13	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Bis(2-chloroethyl)ether	<0.21	*	0.21	0.062	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Date Collected: 11/22/19 14:18

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2-Methylphenol	<0.21	*	0.21	0.066	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
N-Nitrosodi-n-propylamine	<0.083	*	0.083	0.050	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Bis(2-chloroethoxy)methane	<0.21	*	0.21	0.042	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Isophorone	<0.21	*	0.21	0.046	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2-Nitroaniline	<0.21	*	0.21	0.055	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Butyl benzyl phthalate	<0.21	*	0.21	0.078	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Date Collected: 11/22/19 14:18

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Bis(2-ethylhexyl) phthalate	<0.21	*	0.21	0.075	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 07:47	12/06/19 01:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	89		31 - 166				12/05/19 07:47	12/06/19 01:31	1
Phenol-d5	77		30 - 153				12/05/19 07:47	12/06/19 01:31	1
Nitrobenzene-d5	70		37 - 147				12/05/19 07:47	12/06/19 01:31	1
2-Fluorobiphenyl	85		43 - 145				12/05/19 07:47	12/06/19 01:31	1
2,4,6-Tribromophenol	79		31 - 143				12/05/19 07:47	12/06/19 01:31	1
Terphenyl-d14	85		42 - 157				12/05/19 07:47	12/06/19 01:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.80	J B	1.2	0.23	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Arsenic	7.1		0.60	0.20	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Barium	39		0.60	0.068	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Beryllium	0.68		0.24	0.056	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Boron	19		3.0	0.28	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Cadmium	0.11	J B	0.12	0.021	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Calcium	53000	B	120	20	mg/Kg	☼	12/04/19 17:44	12/06/19 11:47	10
Chromium	18		0.60	0.30	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Copper	26		0.60	0.17	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Iron	20000		12	6.2	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Lead	14		0.30	0.14	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Magnesium	24000		6.0	3.0	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Manganese	320		0.60	0.087	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Nickel	37		0.60	0.17	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Potassium	3300		30	11	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Selenium	0.60		0.60	0.35	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Silver	2.2	B	0.30	0.077	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Sodium	200		60	8.8	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Thallium	0.89		0.60	0.30	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Vanadium	21		0.30	0.070	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1
Zinc	62		1.2	0.52	mg/Kg	☼	12/04/19 17:44	12/05/19 18:40	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/04/19 14:48	12/05/19 12:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:48	12/05/19 12:16	1
Boron	0.13	J	0.50	0.050	mg/L		12/04/19 14:48	12/05/19 12:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Date Collected: 11/22/19 14:18

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:48	12/05/19 12:16	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:16	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:16	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:48	12/05/19 12:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:48	12/05/19 12:16	1
Manganese	1.9		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:16	1
Nickel	0.044		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:16	1
Selenium	0.030	J	0.050	0.020	mg/L		12/04/19 14:48	12/05/19 12:16	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:16	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:48	12/05/19 12:16	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.030		0.025	0.010	mg/L		12/05/19 08:11	12/06/19 03:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:48	12/06/19 14:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:48	12/05/19 20:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 07:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.020	0.0065	mg/Kg	☼	12/04/19 13:40	12/05/19 08:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/19 11:26	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

GC/MS VOA

Prep Batch: 518540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	5035	
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	5035	
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	5035	
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	5035	
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	5035	
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	5035	
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	5035	
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	5035	
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	5035	
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	5035	
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	5035	
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	5035	
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	5035	
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	5035	
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	5035	
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	5035	
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	5035	
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	5035	
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	5035	
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	5035	
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	5035	

Analysis Batch: 518572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	8260B	518540
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	8260B	518540
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	8260B	518540
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	8260B	518540
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	8260B	518540
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	8260B	518540
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	8260B	518540
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	8260B	518540
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	8260B	518540
MB 500-518572/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-518572/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 518574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	8260B	518540
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	8260B	518540
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	8260B	518540
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	8260B	518540
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	8260B	518540
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	8260B	518540
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	8260B	518540
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	8260B	518540
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	8260B	518540
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	8260B	518540
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	8260B	518540
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	8260B	518540
MB 500-518574/6	Method Blank	Total/NA	Solid	8260B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

GC/MS VOA (Continued)

Analysis Batch: 518574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-518574/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-518574/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 518838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	3541	
MB 500-518838/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-518838/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 519005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	8270D	518838

Prep Batch: 519014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	3541	
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	3541	
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	3541	
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	3541	
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	3541	
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	3541	
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	3541	
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	3541	
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	3541	
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	3541	
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	3541	
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	3541	
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	3541	
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	3541	
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	3541	
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	3541	
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	3541	
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	3541	
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	3541	
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	3541	
MB 500-519014/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-519014/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-174037-1 MS	2615V2-AI-B11(0-6)	Total/NA	Solid	3541	
500-174037-1 MSD	2615V2-AI-B11(0-6)	Total/NA	Solid	3541	

Analysis Batch: 519028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-518838/1-A	Method Blank	Total/NA	Solid	8270D	518838
LCS 500-518838/2-A	Lab Control Sample	Total/NA	Solid	8270D	518838

Analysis Batch: 519116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-519014/1-A	Method Blank	Total/NA	Solid	8270D	519014
LCS 500-519014/2-A	Lab Control Sample	Total/NA	Solid	8270D	519014

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

GC/MS Semi VOA

Analysis Batch: 519269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	8270D	519014
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	8270D	519014
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	8270D	519014
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	8270D	519014
500-174037-1 MS	2615V2-AI-B11(0-6)	Total/NA	Solid	8270D	519014
500-174037-1 MSD	2615V2-AI-B11(0-6)	Total/NA	Solid	8270D	519014

Analysis Batch: 519297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	8270D	519014
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	8270D	519014
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	8270D	519014
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	8270D	519014
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	8270D	519014
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	8270D	519014
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	8270D	519014
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	8270D	519014
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	8270D	519014
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	8270D	519014
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	8270D	519014
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	8270D	519014
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	8270D	519014
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	8270D	519014
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	8270D	519014
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	8270D	519014

Metals

Leach Batch: 518426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	SPLP East	Solid	1312	
500-174037-2	2615V2-AI-B11(6-12)	SPLP East	Solid	1312	
500-174037-3	2615V2-AI-B11(12-18)	SPLP East	Solid	1312	
500-174037-4	2615V2-AI-B11(18-24)	SPLP East	Solid	1312	
500-174037-5	2615V2-AI-B11(24-30)	SPLP East	Solid	1312	
500-174037-6	2615V2-AI-B10(0-6)	SPLP East	Solid	1312	
500-174037-7	2615V2-AI-B10(6-12)	SPLP East	Solid	1312	
500-174037-8	2615V2-AI-B10(6-12)D	SPLP East	Solid	1312	
500-174037-9	2615V2-AI-B10(12-18)	SPLP East	Solid	1312	
500-174037-10	2615V2-AI-B10(18-24)	SPLP East	Solid	1312	
500-174037-11	2615V2-AI-B10(24-30)	SPLP East	Solid	1312	
500-174037-12	2615V2-AI-B09(0-6)	SPLP East	Solid	1312	
500-174037-13	2615V2-AI-B09(6-12)	SPLP East	Solid	1312	
500-174037-14	2615V2-AI-B09(12-18)	SPLP East	Solid	1312	
500-174037-15	2615V2-AI-B09(18-24)	SPLP East	Solid	1312	
500-174037-16	2615V2-AI-B09(24-30)	SPLP East	Solid	1312	
500-174037-17	2615V2-AI-B08(0-6)	SPLP East	Solid	1312	
500-174037-18	2615V2-AI-B08(6-12)	SPLP East	Solid	1312	
500-174037-19	2615V2-AI-B08(12-18)	SPLP East	Solid	1312	
500-174037-20	2615V2-AI-B08(18-24)	SPLP East	Solid	1312	
LB 500-518426/1-B	Method Blank	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Leach Batch: 518426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-20 MS	2615V2-AI-B08(18-24)	SPLP East	Solid	1312	
500-174037-20 DU	2615V2-AI-B08(18-24)	SPLP East	Solid	1312	

Leach Batch: 518427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	SPLP East	Solid	1312	
LB 500-518427/1-B	Method Blank	SPLP East	Solid	1312	

Leach Batch: 518428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	TCLP	Solid	1311	
500-174037-2	2615V2-AI-B11(6-12)	TCLP	Solid	1311	
500-174037-3	2615V2-AI-B11(12-18)	TCLP	Solid	1311	
500-174037-4	2615V2-AI-B11(18-24)	TCLP	Solid	1311	
500-174037-5	2615V2-AI-B11(24-30)	TCLP	Solid	1311	
500-174037-6	2615V2-AI-B10(0-6)	TCLP	Solid	1311	
500-174037-7	2615V2-AI-B10(6-12)	TCLP	Solid	1311	
500-174037-8	2615V2-AI-B10(6-12)D	TCLP	Solid	1311	
500-174037-9	2615V2-AI-B10(12-18)	TCLP	Solid	1311	
500-174037-10	2615V2-AI-B10(18-24)	TCLP	Solid	1311	
500-174037-11	2615V2-AI-B10(24-30)	TCLP	Solid	1311	
500-174037-12	2615V2-AI-B09(0-6)	TCLP	Solid	1311	
500-174037-13	2615V2-AI-B09(6-12)	TCLP	Solid	1311	
500-174037-14	2615V2-AI-B09(12-18)	TCLP	Solid	1311	
500-174037-15	2615V2-AI-B09(18-24)	TCLP	Solid	1311	
500-174037-16	2615V2-AI-B09(24-30)	TCLP	Solid	1311	
500-174037-17	2615V2-AI-B08(0-6)	TCLP	Solid	1311	
500-174037-18	2615V2-AI-B08(6-12)	TCLP	Solid	1311	
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	1311	
LB 500-518428/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518428/1-C	Method Blank	TCLP	Solid	1311	
500-174037-10 MS	2615V2-AI-B10(18-24)	TCLP	Solid	1311	
500-174037-19 MS	2615V2-AI-B08(12-18)	TCLP	Solid	1311	
500-174037-10 DU	2615V2-AI-B10(18-24)	TCLP	Solid	1311	
500-174037-19 DU	2615V2-AI-B08(12-18)	TCLP	Solid	1311	

Leach Batch: 518429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	1311	
LB2 500-518429/1-B	Method Blank	TCLP	Solid	1311	
LB2 500-518429/1-C	Method Blank	TCLP	Solid	1311	

Leach Batch: 518457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	1311	
LB 500-518457/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518457/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 518578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	7471B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Prep Batch: 518578 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	7471B	
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	7471B	
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	7471B	
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	7471B	
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	7471B	
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	7471B	
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	7471B	
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	7471B	
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	7471B	
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	7471B	
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	7471B	
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	7471B	
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	7471B	
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	7471B	
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	7471B	
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	7471B	
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	7471B	
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	7471B	
MB 500-518578/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-518578/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174037-10 MS	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	
500-174037-10 MSD	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	
500-174037-10 DU	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	

Prep Batch: 518579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	7471B	
MB 500-518579/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-518579/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 518710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	TCLP	Solid	3010A	518428
500-174037-2	2615V2-AI-B11(6-12)	TCLP	Solid	3010A	518428
500-174037-3	2615V2-AI-B11(12-18)	TCLP	Solid	3010A	518428
500-174037-4	2615V2-AI-B11(18-24)	TCLP	Solid	3010A	518428
500-174037-5	2615V2-AI-B11(24-30)	TCLP	Solid	3010A	518428
500-174037-6	2615V2-AI-B10(0-6)	TCLP	Solid	3010A	518428
500-174037-7	2615V2-AI-B10(6-12)	TCLP	Solid	3010A	518428
500-174037-8	2615V2-AI-B10(6-12)D	TCLP	Solid	3010A	518428
500-174037-9	2615V2-AI-B10(12-18)	TCLP	Solid	3010A	518428
500-174037-10	2615V2-AI-B10(18-24)	TCLP	Solid	3010A	518428
500-174037-11	2615V2-AI-B10(24-30)	TCLP	Solid	3010A	518428
500-174037-12	2615V2-AI-B09(0-6)	TCLP	Solid	3010A	518428
500-174037-13	2615V2-AI-B09(6-12)	TCLP	Solid	3010A	518428
500-174037-14	2615V2-AI-B09(12-18)	TCLP	Solid	3010A	518428
500-174037-15	2615V2-AI-B09(18-24)	TCLP	Solid	3010A	518428
500-174037-16	2615V2-AI-B09(24-30)	TCLP	Solid	3010A	518428
500-174037-17	2615V2-AI-B08(0-6)	TCLP	Solid	3010A	518428
500-174037-18	2615V2-AI-B08(6-12)	TCLP	Solid	3010A	518428

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Prep Batch: 518710 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	3010A	518428
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	3010A	518429
LB 500-518428/1-B	Method Blank	TCLP	Solid	3010A	518428
LB2 500-518429/1-B	Method Blank	TCLP	Solid	3010A	518429
LCS 500-518710/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174037-19 MS	2615V2-AI-B08(12-18)	TCLP	Solid	3010A	518428
500-174037-19 DU	2615V2-AI-B08(12-18)	TCLP	Solid	3010A	518428

Prep Batch: 518712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	3010A	518457
LB 500-518457/1-B	Method Blank	TCLP	Solid	3010A	518457
LCS 500-518712/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 518741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	TCLP	Solid	7470A	518428
500-174037-2	2615V2-AI-B11(6-12)	TCLP	Solid	7470A	518428
500-174037-3	2615V2-AI-B11(12-18)	TCLP	Solid	7470A	518428
500-174037-4	2615V2-AI-B11(18-24)	TCLP	Solid	7470A	518428
500-174037-5	2615V2-AI-B11(24-30)	TCLP	Solid	7470A	518428
500-174037-6	2615V2-AI-B10(0-6)	TCLP	Solid	7470A	518428
500-174037-7	2615V2-AI-B10(6-12)	TCLP	Solid	7470A	518428
500-174037-8	2615V2-AI-B10(6-12)D	TCLP	Solid	7470A	518428
500-174037-9	2615V2-AI-B10(12-18)	TCLP	Solid	7470A	518428
500-174037-10	2615V2-AI-B10(18-24)	TCLP	Solid	7470A	518428
500-174037-11	2615V2-AI-B10(24-30)	TCLP	Solid	7470A	518428
500-174037-12	2615V2-AI-B09(0-6)	TCLP	Solid	7470A	518428
500-174037-13	2615V2-AI-B09(6-12)	TCLP	Solid	7470A	518428
500-174037-14	2615V2-AI-B09(12-18)	TCLP	Solid	7470A	518428
500-174037-15	2615V2-AI-B09(18-24)	TCLP	Solid	7470A	518428
500-174037-16	2615V2-AI-B09(24-30)	TCLP	Solid	7470A	518428
500-174037-17	2615V2-AI-B08(0-6)	TCLP	Solid	7470A	518428
500-174037-18	2615V2-AI-B08(6-12)	TCLP	Solid	7470A	518428
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	7470A	518428
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	7470A	518429
LB 500-518428/1-C	Method Blank	TCLP	Solid	7470A	518428
LB2 500-518429/1-C	Method Blank	TCLP	Solid	7470A	518429
MB 500-518741/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-518741/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174037-10 MS	2615V2-AI-B10(18-24)	TCLP	Solid	7470A	518428
500-174037-10 DU	2615V2-AI-B10(18-24)	TCLP	Solid	7470A	518428

Prep Batch: 518742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	7470A	518457
LB 500-518457/1-C	Method Blank	TCLP	Solid	7470A	518457
MB 500-518742/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-518742/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals

Prep Batch: 518767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	3050B	
MB 500-518767/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518767/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 518768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	3050B	
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	3050B	
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	3050B	
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	3050B	
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	3050B	
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	3050B	
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	3050B	
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	3050B	
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	3050B	
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	3050B	
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	3050B	
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	3050B	
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	3050B	
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	3050B	
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	3050B	
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	3050B	
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	3050B	
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	3050B	
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	3050B	
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	3050B	
MB 500-518768/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518768/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-174037-1 MS	2615V2-AI-B11(0-6)	Total/NA	Solid	3050B	
500-174037-1 MSD	2615V2-AI-B11(0-6)	Total/NA	Solid	3050B	
500-174037-1 DU	2615V2-AI-B11(0-6)	Total/NA	Solid	3050B	

Prep Batch: 518864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	SPLP East	Solid	3010A	518426
500-174037-2	2615V2-AI-B11(6-12)	SPLP East	Solid	3010A	518426
500-174037-3	2615V2-AI-B11(12-18)	SPLP East	Solid	3010A	518426
500-174037-4	2615V2-AI-B11(18-24)	SPLP East	Solid	3010A	518426
500-174037-5	2615V2-AI-B11(24-30)	SPLP East	Solid	3010A	518426
500-174037-6	2615V2-AI-B10(0-6)	SPLP East	Solid	3010A	518426
500-174037-7	2615V2-AI-B10(6-12)	SPLP East	Solid	3010A	518426
500-174037-8	2615V2-AI-B10(6-12)D	SPLP East	Solid	3010A	518426
500-174037-9	2615V2-AI-B10(12-18)	SPLP East	Solid	3010A	518426
500-174037-10	2615V2-AI-B10(18-24)	SPLP East	Solid	3010A	518426
500-174037-11	2615V2-AI-B10(24-30)	SPLP East	Solid	3010A	518426
500-174037-12	2615V2-AI-B09(0-6)	SPLP East	Solid	3010A	518426
500-174037-13	2615V2-AI-B09(6-12)	SPLP East	Solid	3010A	518426
500-174037-14	2615V2-AI-B09(12-18)	SPLP East	Solid	3010A	518426
500-174037-15	2615V2-AI-B09(18-24)	SPLP East	Solid	3010A	518426
500-174037-16	2615V2-AI-B09(24-30)	SPLP East	Solid	3010A	518426
500-174037-17	2615V2-AI-B08(0-6)	SPLP East	Solid	3010A	518426

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Prep Batch: 518864 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-18	2615V2-AI-B08(6-12)	SPLP East	Solid	3010A	518426
500-174037-19	2615V2-AI-B08(12-18)	SPLP East	Solid	3010A	518426
500-174037-20	2615V2-AI-B08(18-24)	SPLP East	Solid	3010A	518426
LB 500-518426/1-B	Method Blank	SPLP East	Solid	3010A	518426
LCS 500-518864/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174037-20 MS	2615V2-AI-B08(18-24)	SPLP East	Solid	3010A	518426
500-174037-20 DU	2615V2-AI-B08(18-24)	SPLP East	Solid	3010A	518426

Prep Batch: 518865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	SPLP East	Solid	3010A	518427
LB 500-518427/1-B	Method Blank	SPLP East	Solid	3010A	518427
LCS 500-518865/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 518914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	TCLP	Solid	7470A	518741
500-174037-2	2615V2-AI-B11(6-12)	TCLP	Solid	7470A	518741
500-174037-3	2615V2-AI-B11(12-18)	TCLP	Solid	7470A	518741
500-174037-4	2615V2-AI-B11(18-24)	TCLP	Solid	7470A	518741
500-174037-5	2615V2-AI-B11(24-30)	TCLP	Solid	7470A	518741
500-174037-6	2615V2-AI-B10(0-6)	TCLP	Solid	7470A	518741
500-174037-7	2615V2-AI-B10(6-12)	TCLP	Solid	7470A	518741
500-174037-8	2615V2-AI-B10(6-12)D	TCLP	Solid	7470A	518741
500-174037-9	2615V2-AI-B10(12-18)	TCLP	Solid	7470A	518741
500-174037-10	2615V2-AI-B10(18-24)	TCLP	Solid	7470A	518741
500-174037-11	2615V2-AI-B10(24-30)	TCLP	Solid	7470A	518741
500-174037-12	2615V2-AI-B09(0-6)	TCLP	Solid	7470A	518741
500-174037-13	2615V2-AI-B09(6-12)	TCLP	Solid	7470A	518741
500-174037-14	2615V2-AI-B09(12-18)	TCLP	Solid	7470A	518741
500-174037-15	2615V2-AI-B09(18-24)	TCLP	Solid	7470A	518741
500-174037-16	2615V2-AI-B09(24-30)	TCLP	Solid	7470A	518741
500-174037-17	2615V2-AI-B08(0-6)	TCLP	Solid	7470A	518741
500-174037-18	2615V2-AI-B08(6-12)	TCLP	Solid	7470A	518741
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	7470A	518741
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	7470A	518741
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	7470A	518742
LB 500-518428/1-C	Method Blank	TCLP	Solid	7470A	518741
LB 500-518457/1-C	Method Blank	TCLP	Solid	7470A	518742
LB2 500-518429/1-C	Method Blank	TCLP	Solid	7470A	518741
MB 500-518741/12-A	Method Blank	Total/NA	Solid	7470A	518741
MB 500-518742/12-A	Method Blank	Total/NA	Solid	7470A	518742
LCS 500-518741/13-A	Lab Control Sample	Total/NA	Solid	7470A	518741
LCS 500-518742/13-A	Lab Control Sample	Total/NA	Solid	7470A	518742
500-174037-10 MS	2615V2-AI-B10(18-24)	TCLP	Solid	7470A	518741
500-174037-10 DU	2615V2-AI-B10(18-24)	TCLP	Solid	7470A	518741

Analysis Batch: 518921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	7471B	518578
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	7471B	518578

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Analysis Batch: 518921 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	7471B	518578
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	7471B	518578
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	7471B	518578
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	7471B	518578
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	7471B	518578
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	7471B	518578
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	7471B	518578
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	518578
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	7471B	518578
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	7471B	518578
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	7471B	518578
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	7471B	518578
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	7471B	518578
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	7471B	518578
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	7471B	518578
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	7471B	518578
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	7471B	518578
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	7471B	518578
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	7471B	518579
MB 500-518578/12-A	Method Blank	Total/NA	Solid	7471B	518578
MB 500-518579/12-A	Method Blank	Total/NA	Solid	7471B	518579
LCS 500-518578/13-A	Lab Control Sample	Total/NA	Solid	7471B	518578
LCS 500-518579/13-A	Lab Control Sample	Total/NA	Solid	7471B	518579
500-174037-10 MS	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	518578
500-174037-10 MSD	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	518578
500-174037-10 DU	2615V2-AI-B10(18-24)	Total/NA	Solid	7471B	518578

Analysis Batch: 518950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	TCLP	Solid	6010B	518710
500-174037-2	2615V2-AI-B11(6-12)	TCLP	Solid	6010B	518710
500-174037-3	2615V2-AI-B11(12-18)	TCLP	Solid	6010B	518710
500-174037-4	2615V2-AI-B11(18-24)	TCLP	Solid	6010B	518710
500-174037-5	2615V2-AI-B11(24-30)	TCLP	Solid	6010B	518710
500-174037-6	2615V2-AI-B10(0-6)	TCLP	Solid	6010B	518710
500-174037-7	2615V2-AI-B10(6-12)	TCLP	Solid	6010B	518710
500-174037-8	2615V2-AI-B10(6-12)D	TCLP	Solid	6010B	518710
500-174037-9	2615V2-AI-B10(12-18)	TCLP	Solid	6010B	518710
500-174037-10	2615V2-AI-B10(18-24)	TCLP	Solid	6010B	518710
500-174037-11	2615V2-AI-B10(24-30)	TCLP	Solid	6010B	518710
500-174037-12	2615V2-AI-B09(0-6)	TCLP	Solid	6010B	518710
500-174037-13	2615V2-AI-B09(6-12)	TCLP	Solid	6010B	518710
500-174037-14	2615V2-AI-B09(12-18)	TCLP	Solid	6010B	518710
500-174037-15	2615V2-AI-B09(18-24)	TCLP	Solid	6010B	518710
500-174037-16	2615V2-AI-B09(24-30)	TCLP	Solid	6010B	518710
500-174037-17	2615V2-AI-B08(0-6)	TCLP	Solid	6010B	518710
500-174037-18	2615V2-AI-B08(6-12)	TCLP	Solid	6010B	518710
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	6010B	518710
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	6010B	518710
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	6010B	518712
LB 500-518428/1-B	Method Blank	TCLP	Solid	6010B	518710

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Analysis Batch: 518950 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-518457/1-B	Method Blank	TCLP	Solid	6010B	518712
LB2 500-518429/1-B	Method Blank	TCLP	Solid	6010B	518710
LCS 500-518710/2-A	Lab Control Sample	Total/NA	Solid	6010B	518710
LCS 500-518712/2-A	Lab Control Sample	Total/NA	Solid	6010B	518712
500-174037-19 MS	2615V2-AI-B08(12-18)	TCLP	Solid	6010B	518710
500-174037-19 DU	2615V2-AI-B08(12-18)	TCLP	Solid	6010B	518710

Analysis Batch: 519054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	6010B	518768
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	6010B	518768
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	6010B	518768
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	6010B	518768
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	6010B	518768
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	6010B	518768
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	6010B	518768
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	6010B	518768
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	6010B	518768
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	6010B	518768
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	6010B	518768
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	6010B	518768
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	6010B	518768
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	6010B	518768
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	6010B	518768
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	6010B	518768
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	6010B	518768
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	6010B	518768
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	6010B	518768
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	6010B	518767
MB 500-518767/1-A	Method Blank	Total/NA	Solid	6010B	518767
MB 500-518768/1-A	Method Blank	Total/NA	Solid	6010B	518768
LCS 500-518767/2-A	Lab Control Sample	Total/NA	Solid	6010B	518767
LCS 500-518768/2-A	Lab Control Sample	Total/NA	Solid	6010B	518768
500-174037-1 MS	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768
500-174037-1 MSD	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768
500-174037-1 DU	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768

Analysis Batch: 519055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	SPLP East	Solid	6010B	518864
500-174037-2	2615V2-AI-B11(6-12)	SPLP East	Solid	6010B	518864
500-174037-3	2615V2-AI-B11(12-18)	SPLP East	Solid	6010B	518864
500-174037-4	2615V2-AI-B11(18-24)	SPLP East	Solid	6010B	518864
500-174037-5	2615V2-AI-B11(24-30)	SPLP East	Solid	6010B	518864
500-174037-6	2615V2-AI-B10(0-6)	SPLP East	Solid	6010B	518864
500-174037-7	2615V2-AI-B10(6-12)	SPLP East	Solid	6010B	518864
500-174037-8	2615V2-AI-B10(6-12)D	SPLP East	Solid	6010B	518864
500-174037-9	2615V2-AI-B10(12-18)	SPLP East	Solid	6010B	518864
500-174037-10	2615V2-AI-B10(18-24)	SPLP East	Solid	6010B	518864
500-174037-11	2615V2-AI-B10(24-30)	SPLP East	Solid	6010B	518864

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals (Continued)

Analysis Batch: 519055 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-12	2615V2-AI-B09(0-6)	SPLP East	Solid	6010B	518864
500-174037-13	2615V2-AI-B09(6-12)	SPLP East	Solid	6010B	518864
500-174037-14	2615V2-AI-B09(12-18)	SPLP East	Solid	6010B	518864
500-174037-15	2615V2-AI-B09(18-24)	SPLP East	Solid	6010B	518864
500-174037-16	2615V2-AI-B09(24-30)	SPLP East	Solid	6010B	518864
500-174037-17	2615V2-AI-B08(0-6)	SPLP East	Solid	6010B	518864
500-174037-18	2615V2-AI-B08(6-12)	SPLP East	Solid	6010B	518864
500-174037-19	2615V2-AI-B08(12-18)	SPLP East	Solid	6010B	518864
500-174037-20	2615V2-AI-B08(18-24)	SPLP East	Solid	6010B	518864
500-174037-21	2615V2-AI-B08(24-30)	SPLP East	Solid	6010B	518865
LB 500-518426/1-B	Method Blank	SPLP East	Solid	6010B	518864
LB 500-518427/1-B	Method Blank	SPLP East	Solid	6010B	518865
LCS 500-518864/2-A	Lab Control Sample	Total/NA	Solid	6010B	518864
LCS 500-518865/2-A	Lab Control Sample	Total/NA	Solid	6010B	518865
500-174037-20 MS	2615V2-AI-B08(18-24)	SPLP East	Solid	6010B	518864
500-174037-20 DU	2615V2-AI-B08(18-24)	SPLP East	Solid	6010B	518864

Analysis Batch: 519108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	TCLP	Solid	6020A	518710
500-174037-2	2615V2-AI-B11(6-12)	TCLP	Solid	6020A	518710
500-174037-3	2615V2-AI-B11(12-18)	TCLP	Solid	6020A	518710
500-174037-4	2615V2-AI-B11(18-24)	TCLP	Solid	6020A	518710
500-174037-5	2615V2-AI-B11(24-30)	TCLP	Solid	6020A	518710
500-174037-6	2615V2-AI-B10(0-6)	TCLP	Solid	6020A	518710
500-174037-7	2615V2-AI-B10(6-12)	TCLP	Solid	6020A	518710
500-174037-8	2615V2-AI-B10(6-12)D	TCLP	Solid	6020A	518710
500-174037-9	2615V2-AI-B10(12-18)	TCLP	Solid	6020A	518710
500-174037-10	2615V2-AI-B10(18-24)	TCLP	Solid	6020A	518710
500-174037-11	2615V2-AI-B10(24-30)	TCLP	Solid	6020A	518710
500-174037-12	2615V2-AI-B09(0-6)	TCLP	Solid	6020A	518710
500-174037-13	2615V2-AI-B09(6-12)	TCLP	Solid	6020A	518710
500-174037-14	2615V2-AI-B09(12-18)	TCLP	Solid	6020A	518710
500-174037-15	2615V2-AI-B09(18-24)	TCLP	Solid	6020A	518710
500-174037-16	2615V2-AI-B09(24-30)	TCLP	Solid	6020A	518710
500-174037-17	2615V2-AI-B08(0-6)	TCLP	Solid	6020A	518710
500-174037-18	2615V2-AI-B08(6-12)	TCLP	Solid	6020A	518710
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	6020A	518710
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	6020A	518710
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	6020A	518712
LB 500-518428/1-B	Method Blank	TCLP	Solid	6020A	518710
LB 500-518457/1-B	Method Blank	TCLP	Solid	6020A	518712
LB2 500-518429/1-B	Method Blank	TCLP	Solid	6020A	518710
LCS 500-518710/2-A	Lab Control Sample	Total/NA	Solid	6020A	518710
LCS 500-518712/2-A	Lab Control Sample	Total/NA	Solid	6020A	518712
500-174037-19 MS	2615V2-AI-B08(12-18)	TCLP	Solid	6020A	518710
500-174037-19 DU	2615V2-AI-B08(12-18)	TCLP	Solid	6020A	518710

Analysis Batch: 519196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	6010B	518767

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Metals

Analysis Batch: 519201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	6010B	518768
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	6010B	518768
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	6010B	518768
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	6010B	518768
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	6010B	518768
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	6010B	518768
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	6010B	518768
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	6010B	518768
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	6010B	518768
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	6010B	518768
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	6010B	518768
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	6010B	518768
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	6010B	518768
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	6010B	518768
500-174037-1 MS	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768
500-174037-1 MSD	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768
500-174037-1 DU	2615V2-AI-B11(0-6)	Total/NA	Solid	6010B	518768

Analysis Batch: 519532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-19	2615V2-AI-B08(12-18)	TCLP	Solid	6020A	518710
500-174037-20	2615V2-AI-B08(18-24)	TCLP	Solid	6020A	518710
500-174037-21	2615V2-AI-B08(24-30)	TCLP	Solid	6020A	518712
LB 500-518457/1-B	Method Blank	TCLP	Solid	6020A	518712
LB2 500-518429/1-B	Method Blank	TCLP	Solid	6020A	518710
LCS 500-518712/2-A	Lab Control Sample	Total/NA	Solid	6020A	518712
500-174037-19 MS	2615V2-AI-B08(12-18)	TCLP	Solid	6020A	518710
500-174037-19 DU	2615V2-AI-B08(12-18)	TCLP	Solid	6020A	518710

General Chemistry

Analysis Batch: 517691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	Moisture	
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	Moisture	
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	Moisture	
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	Moisture	
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	Moisture	
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	Moisture	

Analysis Batch: 517785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	Moisture	
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	Moisture	
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	Moisture	
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	Moisture	
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	Moisture	
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	Moisture	
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	Moisture	
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	Moisture	

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

General Chemistry (Continued)

Analysis Batch: 517785 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	Moisture	
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	Moisture	
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	Moisture	
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	Moisture	
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	Moisture	
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	Moisture	
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	Moisture	
500-174037-7 DU	2615V2-AI-B10(6-12)	Total/NA	Solid	Moisture	

Analysis Batch: 518090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174037-1	2615V2-AI-B11(0-6)	Total/NA	Solid	9045D	
500-174037-2	2615V2-AI-B11(6-12)	Total/NA	Solid	9045D	
500-174037-3	2615V2-AI-B11(12-18)	Total/NA	Solid	9045D	
500-174037-4	2615V2-AI-B11(18-24)	Total/NA	Solid	9045D	
500-174037-5	2615V2-AI-B11(24-30)	Total/NA	Solid	9045D	
500-174037-6	2615V2-AI-B10(0-6)	Total/NA	Solid	9045D	
500-174037-7	2615V2-AI-B10(6-12)	Total/NA	Solid	9045D	
500-174037-8	2615V2-AI-B10(6-12)D	Total/NA	Solid	9045D	
500-174037-9	2615V2-AI-B10(12-18)	Total/NA	Solid	9045D	
500-174037-10	2615V2-AI-B10(18-24)	Total/NA	Solid	9045D	
500-174037-11	2615V2-AI-B10(24-30)	Total/NA	Solid	9045D	
500-174037-12	2615V2-AI-B09(0-6)	Total/NA	Solid	9045D	
500-174037-13	2615V2-AI-B09(6-12)	Total/NA	Solid	9045D	
500-174037-14	2615V2-AI-B09(12-18)	Total/NA	Solid	9045D	
500-174037-15	2615V2-AI-B09(18-24)	Total/NA	Solid	9045D	
500-174037-16	2615V2-AI-B09(24-30)	Total/NA	Solid	9045D	
500-174037-17	2615V2-AI-B08(0-6)	Total/NA	Solid	9045D	
500-174037-18	2615V2-AI-B08(6-12)	Total/NA	Solid	9045D	
500-174037-19	2615V2-AI-B08(12-18)	Total/NA	Solid	9045D	
500-174037-20	2615V2-AI-B08(18-24)	Total/NA	Solid	9045D	
500-174037-21	2615V2-AI-B08(24-30)	Total/NA	Solid	9045D	
LCS 500-518090/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-518090/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-174037-1 DU	2615V2-AI-B11(0-6)	Total/NA	Solid	9045D	
500-174037-20 DU	2615V2-AI-B08(18-24)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174037-1	2615V2-AI-B11(0-6)	95	109	92	97
500-174037-2	2615V2-AI-B11(6-12)	92	103	88	98
500-174037-3	2615V2-AI-B11(12-18)	93	102	89	96
500-174037-4	2615V2-AI-B11(18-24)	93	101	88	97
500-174037-5	2615V2-AI-B11(24-30)	92	101	89	95
500-174037-6	2615V2-AI-B10(0-6)	93	105	91	97
500-174037-7	2615V2-AI-B10(6-12)	93	103	87	97
500-174037-8	2615V2-AI-B10(6-12)D	93	105	87	95
500-174037-9	2615V2-AI-B10(12-18)	94	104	88	96
500-174037-10	2615V2-AI-B10(18-24)	91	110	97	103
500-174037-11	2615V2-AI-B10(24-30)	94	104	96	101
500-174037-12	2615V2-AI-B09(0-6)	99	107	99	102
500-174037-13	2615V2-AI-B09(6-12)	94	109	98	103
500-174037-14	2615V2-AI-B09(12-18)	96	104	94	106
500-174037-15	2615V2-AI-B09(18-24)	96	106	95	101
500-174037-16	2615V2-AI-B09(24-30)	93	107	95	103
500-174037-17	2615V2-AI-B08(0-6)	95	107	97	105
500-174037-18	2615V2-AI-B08(6-12)	95	107	98	101
500-174037-19	2615V2-AI-B08(12-18)	94	106	96	101
500-174037-20	2615V2-AI-B08(18-24)	94	108	97	104
500-174037-21	2615V2-AI-B08(24-30)	92	107	95	105
LCS 500-518572/4	Lab Control Sample	87	95	87	96
LCS 500-518574/7	Lab Control Sample	90	92	96	98
LCSD 500-518574/8	Lab Control Sample Dup	85	96	94	99
MB 500-518572/7	Method Blank	90	100	86	95
MB 500-518574/6	Method Blank	90	100	94	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174037-1	2615V2-AI-B11(0-6)	100	105	93	97	80	104
500-174037-1 MS	2615V2-AI-B11(0-6)	108	115	104	100	86	101
500-174037-1 MSD	2615V2-AI-B11(0-6)	99	101	98	95	71	93
500-174037-2	2615V2-AI-B11(6-12)	94	99	91	91	47	93
500-174037-3	2615V2-AI-B11(12-18)	91	94	89	88	38	87
500-174037-4	2615V2-AI-B11(18-24)	101	108	89	90	62	96
500-174037-5	2615V2-AI-B11(24-30)	75	82	94	84	41	99
500-174037-6	2615V2-AI-B10(0-6)	75	79	90	84	72	117
500-174037-7	2615V2-AI-B10(6-12)	69	72	89	79	58	108
500-174037-8	2615V2-AI-B10(6-12)D	74	85	96	90	57	107
500-174037-9	2615V2-AI-B10(12-18)	71	85	91	87	61	114

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174037-10	2615V2-AI-B10(18-24)	72	79	93	90	54	117
500-174037-11	2615V2-AI-B10(24-30)	67	78	87	83	56	114
500-174037-12	2615V2-AI-B09(0-6)	67	75	84	78	75	125
500-174037-13	2615V2-AI-B09(6-12)	71	77	89	90	55	123
500-174037-14	2615V2-AI-B09(12-18)	68	77	80	73	67	114
500-174037-15	2615V2-AI-B09(18-24)	74	79	94	86	68	112
500-174037-16	2615V2-AI-B09(24-30)	63	67	74	70	66	104
500-174037-17	2615V2-AI-B08(0-6)	64	73	91	84	84	109
500-174037-18	2615V2-AI-B08(6-12)	72	78	90	88	60	112
500-174037-19	2615V2-AI-B08(12-18)	70	82	92	87	68	107
500-174037-20	2615V2-AI-B08(18-24)	73	82	91	84	61	110
500-174037-21	2615V2-AI-B08(24-30)	89	77	70	85	79	85
LCS 500-518838/2-A	Lab Control Sample	138	141	116	91	68	92
LCS 500-519014/2-A	Lab Control Sample	79	81	90	99	63	89
MB 500-518838/1-A	Method Blank	137	133	117	94	55	98
MB 500-519014/1-A	Method Blank	75	72	90	97	53	98

Surrogate Legend

- 2FP = 2-Fluorophenol
- PHL = Phenol-d5
- NBZ = Nitrobenzene-d5
- FBP = 2-Fluorobiphenyl
- TBP = 2,4,6-Tribromophenol
- TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518572/7
Matrix: Solid
Analysis Batch: 518572

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/04/19 11:29	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/04/19 11:29	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/04/19 11:29	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 11:29	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 11:29	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/04/19 11:29	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/04/19 11:29	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/04/19 11:29	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/04/19 11:29	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/04/19 11:29	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/04/19 11:29	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/04/19 11:29	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/04/19 11:29	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/04/19 11:29	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/04/19 11:29	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/04/19 11:29	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/04/19 11:29	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/04/19 11:29	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/04/19 11:29	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/04/19 11:29	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 11:29	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/04/19 11:29	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/04/19 11:29	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/04/19 11:29	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/04/19 11:29	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/04/19 11:29	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/04/19 11:29	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/04/19 11:29	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/04/19 11:29	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/04/19 11:29	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/04/19 11:29	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/04/19 11:29	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/04/19 11:29	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/04/19 11:29	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/04/19 11:29	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/04/19 11:29	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/04/19 11:29	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/04/19 11:29	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/04/19 11:29	1
Dibromofluoromethane	86		75 - 126		12/04/19 11:29	1
Toluene-d8 (Surr)	95		75 - 124		12/04/19 11:29	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518572/4

Matrix: Solid

Analysis Batch: 518572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0408		mg/Kg		82	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0421		mg/Kg		84	70 - 122
1,1,2-Trichloroethane	0.0500	0.0427		mg/Kg		85	70 - 125
1,1-Dichloroethane	0.0500	0.0407		mg/Kg		81	70 - 125
1,1-Dichloroethene	0.0500	0.0412		mg/Kg		82	70 - 120
1,2-Dichloroethane	0.0500	0.0409		mg/Kg		82	70 - 130
1,2-Dichloropropane	0.0500	0.0406		mg/Kg		81	70 - 125
2-Butanone (MEK)	0.0500	0.0410		mg/Kg		82	47 - 138
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0384		mg/Kg		77	50 - 148
Acetone	0.0500	0.0489		mg/Kg		98	40 - 150
Benzene	0.0500	0.0421		mg/Kg		84	70 - 125
Bromodichloromethane	0.0500	0.0396		mg/Kg		79	67 - 129
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136
Bromomethane	0.0500	0.0397		mg/Kg		79	70 - 130
Carbon disulfide	0.0500	0.0396		mg/Kg		79	70 - 129
Carbon tetrachloride	0.0500	0.0402		mg/Kg		80	75 - 125
Chlorobenzene	0.0500	0.0441		mg/Kg		88	50 - 150
Chloroethane	0.0500	0.0404		mg/Kg		81	75 - 125
Chloroform	0.0500	0.0399		mg/Kg		80	57 - 135
Chloromethane	0.0500	0.0360		mg/Kg		72	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0403		mg/Kg		81	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125
Dibromochloromethane	0.0500	0.0384		mg/Kg		77	69 - 125
Ethylbenzene	0.0500	0.0423		mg/Kg		85	61 - 136
Methyl tert-butyl ether	0.0500	0.0401		mg/Kg		80	50 - 140
Methylene Chloride	0.0500	0.0405		mg/Kg		81	70 - 126
Styrene	0.0500	0.0419		mg/Kg		84	70 - 125
Tetrachloroethene	0.0500	0.0441		mg/Kg		88	70 - 124
Toluene	0.0500	0.0437		mg/Kg		87	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0411		mg/Kg		82	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0420		mg/Kg		84	70 - 125
Trichloroethene	0.0500	0.0433		mg/Kg		87	70 - 125
Vinyl acetate	0.0500	0.0344		mg/Kg		69	40 - 153
Vinyl chloride	0.0500	0.0391		mg/Kg		78	70 - 125
Xylenes, Total	0.100	0.0860		mg/Kg		86	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		70 - 134
4-Bromofluorobenzene (Surr)	95		75 - 131
Dibromofluoromethane	87		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518574/6
Matrix: Solid
Analysis Batch: 518574

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/04/19 10:48	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/04/19 10:48	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/04/19 10:48	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 10:48	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 10:48	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/04/19 10:48	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/04/19 10:48	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/04/19 10:48	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/04/19 10:48	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/04/19 10:48	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/04/19 10:48	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/04/19 10:48	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/04/19 10:48	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/04/19 10:48	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/04/19 10:48	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/04/19 10:48	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/04/19 10:48	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/04/19 10:48	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/04/19 10:48	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/04/19 10:48	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/04/19 10:48	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/04/19 10:48	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/04/19 10:48	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/04/19 10:48	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/04/19 10:48	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/04/19 10:48	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/04/19 10:48	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/04/19 10:48	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/04/19 10:48	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/04/19 10:48	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/04/19 10:48	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/04/19 10:48	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/04/19 10:48	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/04/19 10:48	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/04/19 10:48	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/04/19 10:48	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/04/19 10:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/04/19 10:48	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/04/19 10:48	1
Dibromofluoromethane	94		75 - 126		12/04/19 10:48	1
Toluene-d8 (Surr)	98		75 - 124		12/04/19 10:48	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518574/7

Matrix: Solid

Analysis Batch: 518574

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0421		mg/Kg		84	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0407		mg/Kg		81	70 - 122
1,1,2-Trichloroethane	0.0500	0.0420		mg/Kg		84	70 - 125
1,1-Dichloroethane	0.0500	0.0385		mg/Kg		77	70 - 125
1,1-Dichloroethene	0.0500	0.0416		mg/Kg		83	70 - 120
1,2-Dichloroethane	0.0500	0.0415		mg/Kg		83	70 - 130
1,2-Dichloropropane	0.0500	0.0385		mg/Kg		77	70 - 125
2-Butanone (MEK)	0.0500	0.0390		mg/Kg		78	47 - 138
2-Hexanone	0.0500	0.0372		mg/Kg		74	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0385		mg/Kg		77	50 - 148
Acetone	0.0500	0.0401		mg/Kg		80	40 - 150
Benzene	0.0500	0.0405		mg/Kg		81	70 - 125
Bromodichloromethane	0.0500	0.0422		mg/Kg		84	67 - 129
Bromoform	0.0500	0.0462		mg/Kg		92	68 - 136
Bromomethane	0.0500	0.0446		mg/Kg		89	70 - 130
Carbon disulfide	0.0500	0.0400		mg/Kg		80	70 - 129
Carbon tetrachloride	0.0500	0.0430		mg/Kg		86	75 - 125
Chlorobenzene	0.0500	0.0414		mg/Kg		83	50 - 150
Chloroethane	0.0500	0.0411		mg/Kg		82	75 - 125
Chloroform	0.0500	0.0408		mg/Kg		82	57 - 135
Chloromethane	0.0500	0.0397		mg/Kg		79	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0421		mg/Kg		84	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0386		mg/Kg		77	70 - 125
Dibromochloromethane	0.0500	0.0441		mg/Kg		88	69 - 125
Ethylbenzene	0.0500	0.0409		mg/Kg		82	61 - 136
Methyl tert-butyl ether	0.0500	0.0420		mg/Kg		84	50 - 140
Methylene Chloride	0.0500	0.0402		mg/Kg		80	70 - 126
Styrene	0.0500	0.0410		mg/Kg		82	70 - 125
Tetrachloroethene	0.0500	0.0436		mg/Kg		87	70 - 124
Toluene	0.0500	0.0405		mg/Kg		81	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0419		mg/Kg		84	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0392		mg/Kg		78	70 - 125
Trichloroethene	0.0500	0.0444		mg/Kg		89	70 - 125
Vinyl acetate	0.0500	0.0367		mg/Kg		73	40 - 153
Vinyl chloride	0.0500	0.0384		mg/Kg		77	70 - 125
Xylenes, Total	0.100	0.0811		mg/Kg		81	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
4-Bromofluorobenzene (Surr)	92		75 - 131
Dibromofluoromethane	96		75 - 126
Toluene-d8 (Surr)	98		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-518574/8
Matrix: Solid
Analysis Batch: 518574

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0473		mg/Kg		95	70 - 128	11	30
1,1,2,2-Tetrachloroethane	0.0500	0.0404		mg/Kg		81	70 - 122	1	30
1,1,2-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 125	3	30
1,1-Dichloroethane	0.0500	0.0427		mg/Kg		85	70 - 125	10	30
1,1-Dichloroethene	0.0500	0.0450		mg/Kg		90	70 - 120	8	30
1,2-Dichloroethane	0.0500	0.0429		mg/Kg		86	70 - 130	3	30
1,2-Dichloropropane	0.0500	0.0427		mg/Kg		85	70 - 125	10	30
2-Butanone (MEK)	0.0500	0.0326		mg/Kg		65	47 - 138	18	30
2-Hexanone	0.0500	0.0334		mg/Kg		67	48 - 146	11	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0334		mg/Kg		67	50 - 148	14	30
Acetone	0.0500	0.0361		mg/Kg		72	40 - 150	11	30
Benzene	0.0500	0.0449		mg/Kg		90	70 - 125	10	30
Bromodichloromethane	0.0500	0.0449		mg/Kg		90	67 - 129	6	30
Bromoform	0.0500	0.0465		mg/Kg		93	68 - 136	1	30
Bromomethane	0.0500	0.0504		mg/Kg		101	70 - 130	12	30
Carbon disulfide	0.0500	0.0438		mg/Kg		88	70 - 129	9	30
Carbon tetrachloride	0.0500	0.0484		mg/Kg		97	75 - 125	12	30
Chlorobenzene	0.0500	0.0468		mg/Kg		94	50 - 150	12	30
Chloroethane	0.0500	0.0433		mg/Kg		87	75 - 125	5	30
Chloroform	0.0500	0.0451		mg/Kg		90	57 - 135	10	30
Chloromethane	0.0500	0.0461		mg/Kg		92	70 - 125	15	30
cis-1,2-Dichloroethene	0.0500	0.0455		mg/Kg		91	70 - 125	8	30
cis-1,3-Dichloropropene	0.0500	0.0425		mg/Kg		85	70 - 125	10	30
Dibromochloromethane	0.0500	0.0463		mg/Kg		93	69 - 125	5	30
Ethylbenzene	0.0500	0.0469		mg/Kg		94	61 - 136	14	30
Methyl tert-butyl ether	0.0500	0.0426		mg/Kg		85	50 - 140	1	30
Methylene Chloride	0.0500	0.0447		mg/Kg		89	70 - 126	11	30
Styrene	0.0500	0.0458		mg/Kg		92	70 - 125	11	30
Tetrachloroethene	0.0500	0.0493		mg/Kg		99	70 - 124	12	30
Toluene	0.0500	0.0458		mg/Kg		92	70 - 125	12	30
trans-1,2-Dichloroethene	0.0500	0.0469		mg/Kg		94	70 - 125	11	30
trans-1,3-Dichloropropene	0.0500	0.0421		mg/Kg		84	70 - 125	7	30
Trichloroethene	0.0500	0.0494		mg/Kg		99	70 - 125	11	30
Vinyl acetate	0.0500	0.0350		mg/Kg		70	40 - 153	5	30
Vinyl chloride	0.0500	0.0452		mg/Kg		90	70 - 125	16	30
Xylenes, Total	0.100	0.0916		mg/Kg		92	53 - 147	12	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	94		75 - 126
Toluene-d8 (Surr)	99		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518838/1-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518838

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/05/19 07:47	12/06/19 00:20	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518838/1-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518838

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/05/19 07:47	12/06/19 00:20	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	137		31 - 166	12/05/19 07:47	12/06/19 00:20	1
Phenol-d5	133		30 - 153	12/05/19 07:47	12/06/19 00:20	1
Nitrobenzene-d5	117		37 - 147	12/05/19 07:47	12/06/19 00:20	1
2-Fluorobiphenyl	94		43 - 145	12/05/19 07:47	12/06/19 00:20	1
2,4,6-Tribromophenol	55		31 - 143	12/05/19 07:47	12/06/19 00:20	1
Terphenyl-d14	98		42 - 157	12/05/19 07:47	12/06/19 00:20	1

Lab Sample ID: LCS 500-518838/2-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.96	*	mg/Kg		147	56 - 122
Bis(2-chloroethyl)ether	1.33	1.71	*	mg/Kg		129	55 - 111
1,3-Dichlorobenzene	1.33	1.27		mg/Kg		95	65 - 124
1,4-Dichlorobenzene	1.33	1.29		mg/Kg		97	61 - 110
1,2-Dichlorobenzene	1.33	1.28		mg/Kg		96	62 - 110
2-Methylphenol	1.33	1.67	*	mg/Kg		125	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	2.32	*	mg/Kg		174	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.92	*	mg/Kg		144	56 - 118
Hexachloroethane	1.33	1.52		mg/Kg		114	60 - 114
2-Chlorophenol	1.33	1.52	*	mg/Kg		114	64 - 110
Nitrobenzene	1.33	1.85	*	mg/Kg		139	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.78	*	mg/Kg		133	60 - 112
1,2,4-Trichlorobenzene	1.33	1.20		mg/Kg		90	66 - 117
Isophorone	1.33	1.85	*	mg/Kg		139	55 - 110
2,4-Dimethylphenol	1.33	1.37		mg/Kg		103	60 - 110
Hexachlorobutadiene	1.33	1.12		mg/Kg		84	56 - 120
Naphthalene	1.33	1.39		mg/Kg		104	63 - 110
2,4-Dichlorophenol	1.33	1.27		mg/Kg		95	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518838/2-A

Matrix: Solid

Analysis Batch: 519028

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 518838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.38		mg/Kg		104	30 - 150
2,4,6-Trichlorophenol	1.33	1.12		mg/Kg		84	57 - 120
2,4,5-Trichlorophenol	1.33	1.15		mg/Kg		86	50 - 120
Hexachlorocyclopentadiene	1.33	0.207	J	mg/Kg		16	10 - 133
2-Methylnaphthalene	1.33	1.31		mg/Kg		98	69 - 112
2-Nitroaniline	1.33	1.97	*	mg/Kg		148	57 - 124
2-Chloronaphthalene	1.33	1.35		mg/Kg		102	69 - 114
4-Chloro-3-methylphenol	1.33	1.51		mg/Kg		113	65 - 122
2,6-Dinitrotoluene	1.33	1.41		mg/Kg		105	70 - 123
2-Nitrophenol	1.33	1.35		mg/Kg		101	60 - 120
3-Nitroaniline	1.33	1.39		mg/Kg		104	40 - 122
Dimethyl phthalate	1.33	1.37		mg/Kg		102	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		14	10 - 100
Acenaphthylene	1.33	1.40		mg/Kg		105	68 - 120
2,4-Dinitrotoluene	1.33	1.46		mg/Kg		110	69 - 124
Acenaphthene	1.33	1.38		mg/Kg		104	65 - 124
Dibenzofuran	1.33	1.35		mg/Kg		101	66 - 115
4-Nitrophenol	2.67	2.54		mg/Kg		95	30 - 122
Fluorene	1.33	1.38		mg/Kg		103	62 - 120
4-Nitroaniline	1.33	1.41		mg/Kg		106	60 - 160
4-Bromophenyl phenyl ether	1.33	1.10		mg/Kg		82	68 - 118
Hexachlorobenzene	1.33	1.06		mg/Kg		80	63 - 124
Diethyl phthalate	1.33	1.41		mg/Kg		106	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.19		mg/Kg		90	62 - 119
Pentachlorophenol	2.67	1.12		mg/Kg		42	13 - 112
N-Nitrosodiphenylamine	1.33	1.31		mg/Kg		98	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.810		mg/Kg		30	10 - 110
Phenanthrene	1.33	1.32		mg/Kg		99	62 - 120
Anthracene	1.33	1.33		mg/Kg		100	70 - 114
Carbazole	1.33	1.43		mg/Kg		107	65 - 142
Di-n-butyl phthalate	1.33	1.54		mg/Kg		115	65 - 120
Fluoranthene	1.33	1.28		mg/Kg		96	62 - 120
Pyrene	1.33	1.51		mg/Kg		113	61 - 128
Butyl benzyl phthalate	1.33	1.79	*	mg/Kg		134	71 - 129
Benzo[a]anthracene	1.33	1.29		mg/Kg		97	67 - 122
Chrysene	1.33	1.36		mg/Kg		102	63 - 120
3,3'-Dichlorobenzidine	1.33	0.945		mg/Kg		71	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.80	*	mg/Kg		135	72 - 131
Di-n-octyl phthalate	1.33	1.54		mg/Kg		116	68 - 134
Benzo[b]fluoranthene	1.33	1.30		mg/Kg		98	69 - 129
Benzo[k]fluoranthene	1.33	1.29		mg/Kg		97	68 - 127
Benzo[a]pyrene	1.33	1.38		mg/Kg		104	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.22		mg/Kg		92	68 - 130
Dibenz(a,h)anthracene	1.33	1.19		mg/Kg		89	64 - 131
Benzo[g,h,i]perylene	1.33	1.30		mg/Kg		97	72 - 131
3 & 4 Methylphenol	1.33	1.59		mg/Kg		119	57 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518838/2-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518838

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	138		31 - 166
Phenol-d5	141		30 - 153
Nitrobenzene-d5	116		37 - 147
2-Fluorobiphenyl	91		43 - 145
2,4,6-Tribromophenol	68		31 - 143
Terphenyl-d14	92		42 - 157

Lab Sample ID: MB 500-519014/1-A
Matrix: Solid
Analysis Batch: 519116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519014

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/05/19 16:16	12/06/19 13:48	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519014/1-A
Matrix: Solid
Analysis Batch: 519116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/05/19 16:16	12/06/19 13:48	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/05/19 16:16	12/06/19 13:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	75		31 - 166	12/05/19 16:16	12/06/19 13:48	1
Phenol-d5	72		30 - 153	12/05/19 16:16	12/06/19 13:48	1
Nitrobenzene-d5	90		37 - 147	12/05/19 16:16	12/06/19 13:48	1
2-Fluorobiphenyl	97		43 - 145	12/05/19 16:16	12/06/19 13:48	1
2,4,6-Tribromophenol	53		31 - 143	12/05/19 16:16	12/06/19 13:48	1
Terphenyl-d14	98		42 - 157	12/05/19 16:16	12/06/19 13:48	1

Lab Sample ID: LCS 500-519014/2-A
Matrix: Solid
Analysis Batch: 519116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.01		mg/Kg		75	56 - 122
Bis(2-chloroethyl)ether	1.33	1.22		mg/Kg		91	55 - 111
1,3-Dichlorobenzene	1.33	1.16		mg/Kg		87	65 - 124
1,4-Dichlorobenzene	1.33	1.19		mg/Kg		89	61 - 110
1,2-Dichlorobenzene	1.33	1.22		mg/Kg		91	62 - 110
2-Methylphenol	1.33	1.16		mg/Kg		87	60 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519014/2-A

Matrix: Solid

Analysis Batch: 519116

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 519014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	1.33	0.772		mg/Kg		58	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.18		mg/Kg		89	56 - 118
Hexachloroethane	1.33	1.23		mg/Kg		92	60 - 114
2-Chlorophenol	1.33	1.22		mg/Kg		92	64 - 110
Nitrobenzene	1.33	1.26		mg/Kg		94	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.36		mg/Kg		102	60 - 112
1,2,4-Trichlorobenzene	1.33	1.14		mg/Kg		86	66 - 117
Isophorone	1.33	1.26		mg/Kg		95	55 - 110
2,4-Dimethylphenol	1.33	1.29		mg/Kg		97	60 - 110
Hexachlorobutadiene	1.33	1.09		mg/Kg		82	56 - 120
Naphthalene	1.33	1.30		mg/Kg		98	63 - 110
2,4-Dichlorophenol	1.33	1.27		mg/Kg		95	58 - 120
4-Chloroaniline	1.33	1.17		mg/Kg		88	30 - 150
2,4,6-Trichlorophenol	1.33	1.12		mg/Kg		84	57 - 120
2,4,5-Trichlorophenol	1.33	1.14		mg/Kg		85	50 - 120
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		9	10 - 133
2-Methylnaphthalene	1.33	1.33		mg/Kg		100	69 - 112
2-Nitroaniline	1.33	1.18		mg/Kg		88	57 - 124
2-Chloronaphthalene	1.33	1.23		mg/Kg		92	69 - 114
4-Chloro-3-methylphenol	1.33	1.32		mg/Kg		99	65 - 122
2,6-Dinitrotoluene	1.33	1.35		mg/Kg		102	70 - 123
2-Nitrophenol	1.33	1.27		mg/Kg		95	60 - 120
3-Nitroaniline	1.33	0.985		mg/Kg		74	40 - 122
Dimethyl phthalate	1.33	1.27		mg/Kg		95	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		9	10 - 100
Acenaphthylene	1.33	1.32		mg/Kg		99	68 - 120
2,4-Dinitrotoluene	1.33	1.31		mg/Kg		98	69 - 124
Acenaphthene	1.33	1.26		mg/Kg		94	65 - 124
Dibenzofuran	1.33	1.29		mg/Kg		97	66 - 115
4-Nitrophenol	2.67	2.40		mg/Kg		90	30 - 122
Fluorene	1.33	1.26		mg/Kg		94	62 - 120
4-Nitroaniline	1.33	0.986		mg/Kg		74	60 - 160
4-Bromophenyl phenyl ether	1.33	1.11		mg/Kg		83	68 - 118
Hexachlorobenzene	1.33	1.02		mg/Kg		77	63 - 124
Diethyl phthalate	1.33	1.21		mg/Kg		91	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.17		mg/Kg		88	62 - 119
Pentachlorophenol	2.67	1.16		mg/Kg		43	13 - 112
N-Nitrosodiphenylamine	1.33	1.30		mg/Kg		97	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.739		mg/Kg		28	10 - 110
Phenanthrene	1.33	1.20		mg/Kg		90	62 - 120
Anthracene	1.33	1.25		mg/Kg		93	70 - 114
Carbazole	1.33	1.41		mg/Kg		106	65 - 142
Di-n-butyl phthalate	1.33	1.34		mg/Kg		100	65 - 120
Fluoranthene	1.33	1.20		mg/Kg		90	62 - 120
Pyrene	1.33	1.36		mg/Kg		102	61 - 128
Butyl benzyl phthalate	1.33	1.41		mg/Kg		106	71 - 129
Benzo[a]anthracene	1.33	1.16		mg/Kg		87	67 - 122
Chrysene	1.33	1.17		mg/Kg		88	63 - 120
3,3'-Dichlorobenzidine	1.33	0.948		mg/Kg		71	35 - 128

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519014/2-A
Matrix: Solid
Analysis Batch: 519116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-ethylhexyl) phthalate	1.33	1.47		mg/Kg		110	72 - 131
Di-n-octyl phthalate	1.33	1.31		mg/Kg		98	68 - 134
Benzo[b]fluoranthene	1.33	1.17		mg/Kg		88	69 - 129
Benzo[k]fluoranthene	1.33	1.30		mg/Kg		98	68 - 127
Benzo[a]pyrene	1.33	1.26		mg/Kg		94	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.40		mg/Kg		105	68 - 130
Dibenz(a,h)anthracene	1.33	1.28		mg/Kg		96	64 - 131
Benzo[g,h,i]perylene	1.33	1.25		mg/Kg		94	72 - 131
3 & 4 Methylphenol	1.33	1.19		mg/Kg		89	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	79		31 - 166
Phenol-d5	81		30 - 153
Nitrobenzene-d5	90		37 - 147
2-Fluorobiphenyl	99		43 - 145
2,4,6-Tribromophenol	63		31 - 143
Terphenyl-d14	89		42 - 157

Lab Sample ID: 500-174037-1 MS
Matrix: Solid
Analysis Batch: 519269

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 519014

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20		1.59	1.83		mg/Kg	☼	115	56 - 122
Bis(2-chloroethyl)ether	<0.20		1.59	1.77		mg/Kg	☼	111	55 - 111
1,3-Dichlorobenzene	<0.20		1.59	1.56		mg/Kg	☼	98	60 - 110
1,4-Dichlorobenzene	<0.20		1.59	1.59		mg/Kg	☼	100	61 - 110
1,2-Dichlorobenzene	<0.20		1.59	1.58		mg/Kg	☼	100	62 - 110
2-Methylphenol	<0.20		1.59	1.79		mg/Kg	☼	113	60 - 120
2,2'-oxybis[1-chloropropane]	<0.20		1.59	1.79		mg/Kg	☼	113	40 - 124
N-Nitrosodi-n-propylamine	<0.080		1.59	1.81		mg/Kg	☼	114	56 - 118
Hexachloroethane	<0.20	F1	1.59	0.932	F1	mg/Kg	☼	59	60 - 114
2-Chlorophenol	<0.20		1.59	1.70		mg/Kg	☼	107	64 - 110
Nitrobenzene	<0.039		1.59	1.65		mg/Kg	☼	104	60 - 116
Bis(2-chloroethoxy)methane	<0.20		1.59	1.74		mg/Kg	☼	110	60 - 112
1,2,4-Trichlorobenzene	<0.20		1.59	1.59		mg/Kg	☼	100	66 - 117
Isophorone	<0.20		1.59	1.70		mg/Kg	☼	107	55 - 110
2,4-Dimethylphenol	<0.39		1.59	1.68		mg/Kg	☼	106	60 - 110
Hexachlorobutadiene	<0.20		1.59	1.65		mg/Kg	☼	104	56 - 120
Naphthalene	<0.039		1.59	1.64		mg/Kg	☼	103	63 - 110
2,4-Dichlorophenol	<0.39		1.59	1.58		mg/Kg	☼	100	58 - 120
4-Chloroaniline	<0.80		1.59	1.14		mg/Kg	☼	72	30 - 150
2,4,6-Trichlorophenol	<0.39		1.59	1.59		mg/Kg	☼	100	57 - 120
2,4,5-Trichlorophenol	<0.39		1.59	1.47		mg/Kg	☼	93	50 - 120
Hexachlorocyclopentadiene	<0.80	F1 *	1.59	<0.80	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	<0.080		1.59	1.67		mg/Kg	☼	105	69 - 112
2-Nitroaniline	<0.20		1.59	1.70		mg/Kg	☼	107	57 - 124
2-Chloronaphthalene	<0.20		1.59	1.68		mg/Kg	☼	106	69 - 114

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174037-1 MS

Matrix: Solid

Analysis Batch: 519269

Client Sample ID: 2615V2-AI-B11(0-6)

Prep Type: Total/NA

Prep Batch: 519014

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
4-Chloro-3-methylphenol	<0.39		1.59	1.73		mg/Kg	☼	109		65 - 122
2,6-Dinitrotoluene	<0.20		1.59	1.69		mg/Kg	☼	107		70 - 123
2-Nitrophenol	<0.39		1.59	1.67		mg/Kg	☼	105		60 - 120
3-Nitroaniline	<0.39		1.59	1.59		mg/Kg	☼	100		40 - 122
Dimethyl phthalate	<0.20		1.59	1.68		mg/Kg	☼	106		69 - 116
2,4-Dinitrophenol	<0.80	F1 *	3.17	<0.80	F1	mg/Kg	☼	0		10 - 100
Acenaphthylene	<0.039		1.59	1.65		mg/Kg	☼	104		68 - 120
2,4-Dinitrotoluene	<0.20		1.59	1.56		mg/Kg	☼	99		69 - 124
Acenaphthene	0.020	J	1.59	1.67		mg/Kg	☼	104		65 - 124
Dibenzofuran	<0.20		1.59	1.69		mg/Kg	☼	107		66 - 115
4-Nitrophenol	<0.80		3.17	2.50		mg/Kg	☼	79		30 - 122
Fluorene	<0.039		1.59	1.71		mg/Kg	☼	108		62 - 120
4-Nitroaniline	<0.39		1.59	1.54		mg/Kg	☼	97		60 - 160
4-Bromophenyl phenyl ether	<0.20		1.59	1.64		mg/Kg	☼	103		68 - 118
Hexachlorobenzene	<0.080		1.59	1.60		mg/Kg	☼	101		63 - 124
Diethyl phthalate	<0.20		1.59	1.70		mg/Kg	☼	107		58 - 120
4-Chlorophenyl phenyl ether	<0.20		1.59	1.66		mg/Kg	☼	104		62 - 119
Pentachlorophenol	<0.80		3.17	1.15		mg/Kg	☼	36		13 - 112
N-Nitrosodiphenylamine	<0.20	F1	1.59	1.81	F1	mg/Kg	☼	114		65 - 112
4,6-Dinitro-2-methylphenol	<0.80	F1	3.17	<0.80	F1	mg/Kg	☼	0		10 - 110
Phenanthrene	0.096		1.59	1.76		mg/Kg	☼	105		62 - 120
Anthracene	<0.039		1.59	1.64		mg/Kg	☼	103		70 - 114
Carbazole	<0.20		1.59	1.73		mg/Kg	☼	109		65 - 142
Di-n-butyl phthalate	<0.20		1.59	1.67		mg/Kg	☼	105		65 - 120
Fluoranthene	<0.039		1.59	1.70		mg/Kg	☼	107		62 - 120
Pyrene	0.020	J	1.59	1.70		mg/Kg	☼	106		61 - 128
Butyl benzyl phthalate	<0.20		1.59	1.60		mg/Kg	☼	101		71 - 129
Benzo[a]anthracene	<0.039		1.59	1.60		mg/Kg	☼	101		67 - 122
Chrysene	<0.039		1.59	1.56		mg/Kg	☼	98		63 - 120
3,3'-Dichlorobenzidine	<0.20		1.59	1.05		mg/Kg	☼	66		35 - 128
Bis(2-ethylhexyl) phthalate	<0.20		1.59	1.64		mg/Kg	☼	103		72 - 131
Di-n-octyl phthalate	<0.20		1.59	1.69		mg/Kg	☼	106		68 - 134
Benzo[b]fluoranthene	<0.039		1.59	1.69		mg/Kg	☼	106		69 - 129
Benzo[k]fluoranthene	<0.039		1.59	1.71		mg/Kg	☼	108		68 - 127
Benzo[a]pyrene	<0.039		1.59	1.59		mg/Kg	☼	100		65 - 133
Indeno[1,2,3-cd]pyrene	<0.039	F1	1.59	1.09		mg/Kg	☼	69		68 - 130
Dibenz(a,h)anthracene	<0.039		1.59	1.17		mg/Kg	☼	74		64 - 131
Benzo[g,h,i]perylene	<0.039	F1	1.59	1.02	F1	mg/Kg	☼	64		72 - 131
3 & 4 Methylphenol	<0.20		1.59	1.69		mg/Kg	☼	106		57 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	108		31 - 166
Phenol-d5	115		30 - 153
Nitrobenzene-d5	104		37 - 147
2-Fluorobiphenyl	100		43 - 145
2,4,6-Tribromophenol	86		31 - 143
Terphenyl-d14	101		42 - 157

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174037-1 MSD

Matrix: Solid

Analysis Batch: 519269

Client Sample ID: 2615V2-AI-B11(0-6)

Prep Type: Total/NA

Prep Batch: 519014

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result			Result							
Phenol	<0.20		1.59	1.68		mg/Kg	☼	106	56 - 122	8	30
Bis(2-chloroethyl)ether	<0.20		1.59	1.63		mg/Kg	☼	103	55 - 111	8	30
1,3-Dichlorobenzene	<0.20		1.59	1.43		mg/Kg	☼	90	60 - 110	8	30
1,4-Dichlorobenzene	<0.20		1.59	1.45		mg/Kg	☼	92	61 - 110	9	30
1,2-Dichlorobenzene	<0.20		1.59	1.42		mg/Kg	☼	89	62 - 110	11	30
2-Methylphenol	<0.20		1.59	1.59		mg/Kg	☼	100	60 - 120	12	30
2,2'-oxybis[1-chloropropane]	<0.20		1.59	1.59		mg/Kg	☼	101	40 - 124	12	30
N-Nitrosodi-n-propylamine	<0.080		1.59	1.70		mg/Kg	☼	107	56 - 118	6	30
Hexachloroethane	<0.20	F1	1.59	0.804	F1	mg/Kg	☼	51	60 - 114	15	30
2-Chlorophenol	<0.20		1.59	1.52		mg/Kg	☼	96	64 - 110	11	30
Nitrobenzene	<0.039		1.59	1.56		mg/Kg	☼	98	60 - 116	5	30
Bis(2-chloroethoxy)methane	<0.20		1.59	1.65		mg/Kg	☼	104	60 - 112	5	30
1,2,4-Trichlorobenzene	<0.20		1.59	1.55		mg/Kg	☼	98	66 - 117	3	30
Isophorone	<0.20		1.59	1.64		mg/Kg	☼	103	55 - 110	4	30
2,4-Dimethylphenol	<0.39		1.59	1.61		mg/Kg	☼	101	60 - 110	4	30
Hexachlorobutadiene	<0.20		1.59	1.57		mg/Kg	☼	99	56 - 120	5	30
Naphthalene	<0.039		1.59	1.53		mg/Kg	☼	97	63 - 110	6	30
2,4-Dichlorophenol	<0.39		1.59	1.54		mg/Kg	☼	97	58 - 120	3	30
4-Chloroaniline	<0.80		1.59	1.20		mg/Kg	☼	76	30 - 150	5	30
2,4,6-Trichlorophenol	<0.39		1.59	1.35		mg/Kg	☼	85	57 - 120	16	30
2,4,5-Trichlorophenol	<0.39		1.59	1.37		mg/Kg	☼	86	50 - 120	7	30
Hexachlorocyclopentadiene	<0.80	F1 *	1.59	<0.80	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	<0.080		1.59	1.58		mg/Kg	☼	100	69 - 112	5	30
2-Nitroaniline	<0.20		1.59	1.57		mg/Kg	☼	99	57 - 124	8	30
2-Chloronaphthalene	<0.20		1.59	1.57		mg/Kg	☼	99	69 - 114	7	30
4-Chloro-3-methylphenol	<0.39		1.59	1.58		mg/Kg	☼	99	65 - 122	9	30
2,6-Dinitrotoluene	<0.20		1.59	1.57		mg/Kg	☼	99	70 - 123	8	30
2-Nitrophenol	<0.39		1.59	1.56		mg/Kg	☼	98	60 - 120	7	30
3-Nitroaniline	<0.39		1.59	1.56		mg/Kg	☼	98	40 - 122	2	30
Dimethyl phthalate	<0.20		1.59	1.56		mg/Kg	☼	98	69 - 116	7	30
2,4-Dinitrophenol	<0.80	F1 *	3.17	<0.80	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.039		1.59	1.53		mg/Kg	☼	97	68 - 120	7	30
2,4-Dinitrotoluene	<0.20		1.59	1.43		mg/Kg	☼	90	69 - 124	9	30
Acenaphthene	0.020	J	1.59	1.58		mg/Kg	☼	98	65 - 124	6	30
Dibenzofuran	<0.20		1.59	1.58		mg/Kg	☼	99	66 - 115	7	30
4-Nitrophenol	<0.80		3.17	2.72		mg/Kg	☼	86	30 - 122	8	30
Fluorene	<0.039		1.59	1.59		mg/Kg	☼	100	62 - 120	7	30
4-Nitroaniline	<0.39		1.59	1.50		mg/Kg	☼	94	60 - 160	3	30
4-Bromophenyl phenyl ether	<0.20		1.59	1.51		mg/Kg	☼	95	68 - 118	8	30
Hexachlorobenzene	<0.080		1.59	1.49		mg/Kg	☼	94	63 - 124	7	30
Diethyl phthalate	<0.20		1.59	1.56		mg/Kg	☼	98	58 - 120	9	30
4-Chlorophenyl phenyl ether	<0.20		1.59	1.56		mg/Kg	☼	98	62 - 119	6	30
Pentachlorophenol	<0.80		3.17	0.845		mg/Kg	☼	27	13 - 112	30	30
N-Nitrosodiphenylamine	<0.20	F1	1.59	1.63		mg/Kg	☼	103	65 - 112	10	30
4,6-Dinitro-2-methylphenol	<0.80	F1	3.17	<0.80	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.096		1.59	1.62		mg/Kg	☼	96	62 - 120	8	30
Anthracene	<0.039		1.59	1.51		mg/Kg	☼	95	70 - 114	8	30
Carbazole	<0.20		1.59	1.60		mg/Kg	☼	101	65 - 142	8	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174037-1 MSD

Matrix: Solid

Analysis Batch: 519269

Client Sample ID: 2615V2-AI-B11(0-6)

Prep Type: Total/NA

Prep Batch: 519014

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-butyl phthalate	<0.20		1.59	1.55		mg/Kg	☼	98	65 - 120	7	30
Fluoranthene	<0.039		1.59	1.56		mg/Kg	☼	99	62 - 120	8	30
Pyrene	0.020	J	1.59	1.55		mg/Kg	☼	97	61 - 128	9	30
Butyl benzyl phthalate	<0.20		1.59	1.47		mg/Kg	☼	93	71 - 129	8	30
Benzo[a]anthracene	<0.039		1.59	1.44		mg/Kg	☼	91	67 - 122	10	30
Chrysene	<0.039		1.59	1.49		mg/Kg	☼	94	63 - 120	4	30
3,3'-Dichlorobenzidine	<0.20		1.59	1.02		mg/Kg	☼	65	35 - 128	2	30
Bis(2-ethylhexyl) phthalate	<0.20		1.59	1.51		mg/Kg	☼	95	72 - 131	8	30
Di-n-octyl phthalate	<0.20		1.59	1.57		mg/Kg	☼	99	68 - 134	7	30
Benzo[b]fluoranthene	<0.039		1.59	1.66		mg/Kg	☼	104	69 - 129	2	30
Benzo[k]fluoranthene	<0.039		1.59	1.49		mg/Kg	☼	94	68 - 127	14	30
Benzo[a]pyrene	<0.039		1.59	1.48		mg/Kg	☼	93	65 - 133	7	30
Indeno[1,2,3-cd]pyrene	<0.039	F1	1.59	1.02	F1	mg/Kg	☼	64	68 - 130	7	30
Dibenz(a,h)anthracene	<0.039		1.59	1.10		mg/Kg	☼	70	64 - 131	6	30
Benzo[g,h,i]perylene	<0.039	F1	1.59	0.954	F1	mg/Kg	☼	60	72 - 131	7	30
3 & 4 Methylphenol	<0.20		1.59	1.53		mg/Kg	☼	96	57 - 120	10	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	99		31 - 166
Phenol-d5	101		30 - 153
Nitrobenzene-d5	98		37 - 147
2-Fluorobiphenyl	95		43 - 145
2,4,6-Tribromophenol	71		31 - 143
Terphenyl-d14	93		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-518710/2-A

Matrix: Solid

Analysis Batch: 518950

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 518710

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.484	J	mg/L		97	80 - 120
Beryllium	0.0500	0.0489		mg/L		98	80 - 120
Boron	1.00	0.959		mg/L		96	80 - 120
Cadmium	0.0500	0.0480		mg/L		96	80 - 120
Chromium	0.200	0.198		mg/L		99	80 - 120
Cobalt	0.500	0.478		mg/L		96	80 - 120
Iron	1.00	0.983		mg/L		98	80 - 120
Lead	0.100	0.100		mg/L		100	80 - 120
Manganese	0.500	0.489		mg/L		98	80 - 120
Nickel	0.500	0.482		mg/L		96	80 - 120
Selenium	0.100	0.0903		mg/L		90	80 - 120
Silver	0.0500	0.0475		mg/L		95	80 - 120
Zinc	0.500	0.478	J	mg/L		96	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518712/2-A
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518712
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.477	J	mg/L		95	80 - 120
Beryllium	0.0500	0.0479		mg/L		96	80 - 120
Boron	1.00	0.944		mg/L		94	80 - 120
Cadmium	0.0500	0.0477		mg/L		95	80 - 120
Chromium	0.200	0.194		mg/L		97	80 - 120
Cobalt	0.500	0.467		mg/L		93	80 - 120
Iron	1.00	0.953		mg/L		95	80 - 120
Lead	0.100	0.0967		mg/L		97	80 - 120
Manganese	0.500	0.476		mg/L		95	80 - 120
Nickel	0.500	0.473		mg/L		95	80 - 120
Selenium	0.100	0.0947		mg/L		95	80 - 120
Silver	0.0500	0.0470		mg/L		94	80 - 120
Zinc	0.500	0.465	J	mg/L		93	80 - 120

Lab Sample ID: MB 500-518767/1-A
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.394	J	2.0	0.39	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Barium	<1.0		1.0	0.11	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Boron	<5.0		5.0	0.47	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Cadmium	0.0534	J	0.20	0.036	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Calcium	<20		20	3.4	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Copper	<1.0		1.0	0.28	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Iron	<20		20	10	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Lead	<0.50		0.50	0.23	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Magnesium	<10		10	5.0	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Potassium	<50		50	18	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Silver	0.170	J	0.50	0.13	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Sodium	<100		100	15	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/04/19 17:44	12/05/19 16:56	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/04/19 17:44	12/05/19 16:56	1

Lab Sample ID: LCS 500-518767/2-A
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518767
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	47.2		mg/Kg		94	80 - 120
Arsenic	10.0	9.09		mg/Kg		91	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518767/2-A
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	200	186		mg/Kg		93	80 - 120
Beryllium	5.00	4.72		mg/Kg		94	80 - 120
Boron	100	83.9		mg/Kg		84	80 - 120
Cadmium	5.00	4.50		mg/Kg		90	80 - 120
Calcium	1000	977		mg/Kg		98	80 - 120
Chromium	20.0	19.6		mg/Kg		98	80 - 120
Cobalt	50.0	47.6		mg/Kg		95	80 - 120
Copper	25.0	24.0		mg/Kg		96	80 - 120
Iron	100	107		mg/Kg		107	80 - 120
Lead	10.0	9.57		mg/Kg		96	80 - 120
Magnesium	1000	946		mg/Kg		95	80 - 120
Manganese	50.0	47.2		mg/Kg		94	80 - 120
Nickel	50.0	47.8		mg/Kg		96	80 - 120
Potassium	1000	969		mg/Kg		97	80 - 120
Selenium	10.0	8.13		mg/Kg		81	80 - 120
Silver	5.00	4.51		mg/Kg		90	80 - 120
Sodium	1000	978		mg/Kg		98	80 - 120
Thallium	10.0	8.67		mg/Kg		87	80 - 120
Vanadium	50.0	47.5		mg/Kg		95	80 - 120
Zinc	50.0	46.8		mg/Kg		94	80 - 120

Lab Sample ID: MB 500-518768/1-A
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Barium	<1.0		1.0	0.11	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Boron	0.489	J	5.0	0.47	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Cadmium	0.0526	J	0.20	0.036	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Calcium	<20		20	3.4	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Chromium	0.664	J	1.0	0.50	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Copper	1.27		1.0	0.28	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Iron	16.2	J	20	10	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Lead	<0.50		0.50	0.23	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Magnesium	<10		10	5.0	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Potassium	<50		50	18	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Silver	0.147	J	0.50	0.13	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Sodium	<100		100	15	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/04/19 17:49	12/05/19 14:47	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/04/19 17:49	12/05/19 14:47	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518768/2-A
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518768
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	48.0		mg/Kg		96	80 - 120
Arsenic	10.0	9.06		mg/Kg		91	80 - 120
Barium	200	188		mg/Kg		94	80 - 120
Beryllium	5.00	4.61		mg/Kg		92	80 - 120
Boron	100	85.8		mg/Kg		86	80 - 120
Cadmium	5.00	4.56		mg/Kg		91	80 - 120
Calcium	1000	952		mg/Kg		95	80 - 120
Chromium	20.0	19.7		mg/Kg		98	80 - 120
Cobalt	50.0	47.7		mg/Kg		95	80 - 120
Copper	25.0	25.0		mg/Kg		100	80 - 120
Iron	100	117		mg/Kg		117	80 - 120
Lead	10.0	9.31		mg/Kg		93	80 - 120
Magnesium	1000	925		mg/Kg		93	80 - 120
Manganese	50.0	46.3		mg/Kg		93	80 - 120
Nickel	50.0	47.9		mg/Kg		96	80 - 120
Potassium	1000	978		mg/Kg		98	80 - 120
Selenium	10.0	8.18		mg/Kg		82	80 - 120
Silver	5.00	4.70		mg/Kg		94	80 - 120
Sodium	1000	1000		mg/Kg		100	80 - 120
Thallium	10.0	8.76		mg/Kg		88	80 - 120
Vanadium	50.0	48.0		mg/Kg		96	80 - 120
Zinc	50.0	46.0		mg/Kg		92	80 - 120

Lab Sample ID: 500-174037-1 MS
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.65	J F1	27.4	5.39	F1	mg/Kg	☼	17	75 - 125
Arsenic	8.0	F1	5.48	13.6		mg/Kg	☼	103	75 - 125
Barium	27		110	118		mg/Kg	☼	84	75 - 125
Beryllium	0.51		2.74	2.83		mg/Kg	☼	85	75 - 125
Boron	13	B	54.8	56.2		mg/Kg	☼	79	75 - 125
Cadmium	0.11	B	2.74	2.26		mg/Kg	☼	78	75 - 125
Chromium	14	B	11.0	23.1		mg/Kg	☼	85	75 - 125
Cobalt	12		27.4	39.6		mg/Kg	☼	100	75 - 125
Copper	31	B F1	13.7	38.7	F1	mg/Kg	☼	59	75 - 125
Iron	17000	B	54.8	19500	4	mg/Kg	☼	3896	75 - 125
Lead	16	F1	5.48	21.0		mg/Kg	☼	96	75 - 125
Magnesium	26000		548	31700	4	mg/Kg	☼	1132	75 - 125
Manganese	250	F2	27.4	478	4	mg/Kg	☼	822	75 - 125
Nickel	32		27.4	60.0		mg/Kg	☼	102	75 - 125
Potassium	2200		548	4110	4	mg/Kg	☼	344	75 - 125
Selenium	0.45	J F1	5.48	4.08	F1	mg/Kg	☼	66	75 - 125
Silver	1.8	B	2.74	4.21		mg/Kg	☼	87	75 - 125
Sodium	1100		548	1510		mg/Kg	☼	80	75 - 125
Thallium	0.75	F1	5.48	4.72	F1	mg/Kg	☼	72	75 - 125
Vanadium	16		27.4	41.3		mg/Kg	☼	92	75 - 125
Zinc	40	F1 F2	27.4	102	F1	mg/Kg	☼	224	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP)

Lab Sample ID: 500-174037-1 MS
Matrix: Solid
Analysis Batch: 519201

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	57000		548	73800	4	mg/Kg	☼	2983	75 - 125

Lab Sample ID: 500-174037-1 MSD
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.65	J F1	27.7	5.39	F1	mg/Kg	☼	17	75 - 125	0	20
Arsenic	8.0	F1	5.54	11.6	F1	mg/Kg	☼	65	75 - 125	16	20
Barium	27		111	117		mg/Kg	☼	82	75 - 125	1	20
Beryllium	0.51		2.77	2.88		mg/Kg	☼	85	75 - 125	2	20
Boron	13	B	55.4	59.1		mg/Kg	☼	84	75 - 125	5	20
Cadmium	0.11	B	2.77	2.29		mg/Kg	☼	79	75 - 125	2	20
Chromium	14	B	11.1	24.6		mg/Kg	☼	97	75 - 125	6	20
Cobalt	12		27.7	39.7		mg/Kg	☼	99	75 - 125	0	20
Copper	31	B F1	13.9	39.1	F1	mg/Kg	☼	62	75 - 125	1	20
Iron	17000	B	55.4	17000	4	mg/Kg	☼	-577	75 - 125	13	20
Lead	16	F1	5.54	19.2	F1	mg/Kg	☼	63	75 - 125	9	20
Magnesium	26000		554	30300	4	mg/Kg	☼	865	75 - 125	5	20
Manganese	250	F2	27.7	281	4 F2	mg/Kg	☼	100	75 - 125	52	20
Nickel	32		27.7	59.0		mg/Kg	☼	97	75 - 125	2	20
Potassium	2200		554	4230	4	mg/Kg	☼	362	75 - 125	3	20
Selenium	0.45	J F1	5.54	4.08	F1	mg/Kg	☼	65	75 - 125	0	20
Silver	1.8	B	2.77	4.29		mg/Kg	☼	89	75 - 125	2	20
Sodium	1100		554	1590		mg/Kg	☼	94	75 - 125	5	20
Thallium	0.75	F1	5.54	5.07		mg/Kg	☼	78	75 - 125	7	20
Vanadium	16		27.7	43.0		mg/Kg	☼	97	75 - 125	4	20
Zinc	40	F1 F2	27.7	67.8	F2	mg/Kg	☼	98	75 - 125	40	20

Lab Sample ID: 500-174037-1 MSD
Matrix: Solid
Analysis Batch: 519201

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	57000		554	69900	4	mg/Kg	☼	2244	75 - 125	5	20

Lab Sample ID: 500-174037-1 DU
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768
%Rec.

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	0.65	J F1	0.548	J	mg/Kg	☼	16	20
Arsenic	8.0	F1	5.49	F3	mg/Kg	☼	37	20
Barium	27		28.5		mg/Kg	☼	7	20
Beryllium	0.51		0.470		mg/Kg	☼	8	20
Boron	13	B	12.0		mg/Kg	☼	5	20
Cadmium	0.11	B	0.0854	J F5	mg/Kg	☼	28	20
Chromium	14	B	13.7		mg/Kg	☼	0.6	20
Cobalt	12		10.4		mg/Kg	☼	16	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174037-1 DU
Matrix: Solid
Analysis Batch: 519054

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Copper	31	B F1	21.9	F3	mg/Kg	☼	33	20
Iron	17000	B	14900		mg/Kg	☼	15	20
Lead	16	F1	12.3	F3	mg/Kg	☼	24	20
Magnesium	26000		29900		mg/Kg	☼	16	20
Manganese	250	F2	251		mg/Kg	☼	0.9	20
Nickel	32		27.3		mg/Kg	☼	16	20
Potassium	2200		2090		mg/Kg	☼	6	20
Selenium	0.45	J F1	0.522	J	mg/Kg	☼	16	20
Silver	1.8	B	1.81		mg/Kg	☼	2	20
Sodium	1100		1020		mg/Kg	☼	5	20
Thallium	0.75	F1	0.685		mg/Kg	☼	9	20
Vanadium	16		16.2		mg/Kg	☼	1	20
Zinc	40	F1 F2	40.0		mg/Kg	☼	1	20

Lab Sample ID: 500-174037-1 DU
Matrix: Solid
Analysis Batch: 519201

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA
Prep Batch: 518768

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Calcium	57000		70200		mg/Kg	☼	20	20

Lab Sample ID: LCS 500-518864/2-A
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518864
%Rec.

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Manganese	0.500	0.507		mg/L		101	80 - 120
Nickel	0.500	0.509		mg/L		102	80 - 120

Lab Sample ID: LCS 500-518865/2-A
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518865
%Rec.

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Manganese	0.500	0.504		mg/L		101	80 - 120

Lab Sample ID: LB 500-518428/1-B
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518710

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 09:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 09:59	1
Boron	<0.50		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 09:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 09:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 09:59	1
Cobalt	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 09:59	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 09:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 09:59	1
Manganese	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 09:59	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-518428/1-B
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518710

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nickel	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 09:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 09:59	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 09:59	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 09:59	1

Lab Sample ID: LB2 500-518429/1-B
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518710

Analyte	LB2 LB2		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:45	12/05/19 11:59	1
Boron	<0.50		0.50	0.050	mg/L		12/04/19 14:45	12/05/19 11:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:45	12/05/19 11:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:59	1
Cobalt	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:59	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:45	12/05/19 11:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:45	12/05/19 11:59	1
Manganese	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:59	1
Nickel	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:45	12/05/19 11:59	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:45	12/05/19 11:59	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:45	12/05/19 11:59	1

Lab Sample ID: 500-174037-19 MS
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Barium	0.67	F1	0.500	1.02	F1	mg/L		71	75 - 125
Beryllium	<0.0040		0.0500	0.0402		mg/L		80	75 - 125
Boron	0.16	J	1.00	0.933		mg/L		78	75 - 125
Cadmium	<0.0050		0.0500	0.0405		mg/L		81	75 - 125
Chromium	<0.025		0.200	0.166		mg/L		83	75 - 125
Cobalt	0.015	J	0.500	0.398		mg/L		77	75 - 125
Iron	<0.40		1.00	0.852		mg/L		85	75 - 125
Lead	<0.0075		0.100	0.0796		mg/L		80	75 - 125
Manganese	1.8	F1	0.500	2.12	F1	mg/L		54	75 - 125
Nickel	0.045		0.500	0.433		mg/L		78	75 - 125
Selenium	<0.050		0.100	0.104		mg/L		104	75 - 125
Silver	<0.025		0.0500	0.0451		mg/L		90	75 - 125
Zinc	<0.50		0.500	0.439	J	mg/L		88	75 - 125

Lab Sample ID: 500-174037-19 DU
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	RPD Limit
			Result	Qualifier				
Barium	0.67	F1	0.719		mg/L		8	20

Euromins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174037-19 DU
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.16	J	0.164	J	mg/L		6	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.015	J	0.0166	J	mg/L		8	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8	F1	1.96		mg/L		6	20
Nickel	0.045		0.0485		mg/L		7	20
Selenium	<0.050		0.0279	J	mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50		<0.50		mg/L		NC	20

Lab Sample ID: LB 500-518457/1-B
Matrix: Solid
Analysis Batch: 518950

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518712

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/04/19 14:48	12/05/19 12:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/04/19 14:48	12/05/19 12:07	1
Boron	<0.50		0.50	0.050	mg/L		12/04/19 14:48	12/05/19 12:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/04/19 14:48	12/05/19 12:07	1
Chromium	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:07	1
Cobalt	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:07	1
Iron	<0.40		0.40	0.20	mg/L		12/04/19 14:48	12/05/19 12:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/04/19 14:48	12/05/19 12:07	1
Manganese	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:07	1
Nickel	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:07	1
Selenium	<0.050		0.050	0.020	mg/L		12/04/19 14:48	12/05/19 12:07	1
Silver	<0.025		0.025	0.010	mg/L		12/04/19 14:48	12/05/19 12:07	1
Zinc	<0.50		0.50	0.020	mg/L		12/04/19 14:48	12/05/19 12:07	1

Lab Sample ID: LB 500-518426/1-B
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 518864

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:05	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 08:07	12/06/19 04:05	1

Lab Sample ID: 500-174037-20 MS
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B08(18-24)
Prep Type: SPLP East
Prep Batch: 518864

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Manganese	0.020	J	0.500	0.537		mg/L		103	75 - 125
Nickel	<0.025		0.500	0.533		mg/L		107	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174037-20 DU
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B08(18-24)
Prep Type: SPLP East
Prep Batch: 518864

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Manganese	0.020	J	0.0206	J	mg/L		2	20
Nickel	<0.025		<0.025		mg/L		NC	20

Lab Sample ID: LB 500-518427/1-B
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 518865

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 08:11	12/06/19 02:54	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-518710/2-A
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518710

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.100	0.103		mg/L		103	80 - 120

Lab Sample ID: LCS 500-518712/2-A
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Lab Sample ID: LCS 500-518712/2-A
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Lab Sample ID: LB 500-518428/1-B
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518710

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/05/19 17:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 17:56	1

Lab Sample ID: LB2 500-518429/1-B
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518710

Analyte	LB2	LB2	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:45	12/05/19 19:45	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LB2 500-518429/1-B
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518710

Analyte	LB2 LB2		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:45	12/06/19 14:04	1

Lab Sample ID: 500-174037-19 MS
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Thallium	<0.0020		0.100	0.108		mg/L		108	75 - 125

Lab Sample ID: 500-174037-19 MS
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Antimony	<0.0060		0.500	0.519		mg/L		104	75 - 125

Lab Sample ID: 500-174037-19 DU
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: 500-174037-19 DU
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: 2615V2-AI-B08(12-18)
Prep Type: TCLP
Prep Batch: 518710

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20

Lab Sample ID: LB 500-518457/1-B
Matrix: Solid
Analysis Batch: 519108

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518712

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Thallium	<0.0020		0.0020	0.0020	mg/L		12/04/19 14:48	12/05/19 19:52	1

Lab Sample ID: LB 500-518457/1-B
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518712

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/04/19 14:48	12/06/19 14:12	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-518741/12-A
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 08:43	1

Lab Sample ID: LCS 500-518741/13-A
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518741
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00207		mg/L		104	80 - 120

Lab Sample ID: MB 500-518742/12-A
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518742

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 07:51	1

Lab Sample ID: LCS 500-518742/13-A
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518742
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00212		mg/L		106	80 - 120

Lab Sample ID: LB 500-518428/1-C
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518741

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 08:46	1

Lab Sample ID: LB2 500-518429/1-C
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518741

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 09:37	1

Lab Sample ID: 500-174037-10 MS
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: 2615V2-AI-B10(18-24)
Prep Type: TCLP
Prep Batch: 518741
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000992		mg/L		99	75 - 125

Lab Sample ID: 500-174037-10 DU
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: 2615V2-AI-B10(18-24)
Prep Type: TCLP
Prep Batch: 518741

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 7470A - TCLP Mercury

Lab Sample ID: LB 500-518457/1-C
Matrix: Solid
Analysis Batch: 518914

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518742

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/04/19 16:10	12/05/19 07:57	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-518578/12-A
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518578

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/04/19 13:40	12/05/19 07:26	1

Lab Sample ID: LCS 500-518578/13-A
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.181		mg/Kg		109	80 - 120

Lab Sample ID: 500-174037-10 MS
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: 2615V2-AI-B10(18-24)
Prep Type: Total/NA
Prep Batch: 518578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.026		0.0959	0.114		mg/Kg	☼	92	75 - 125

Lab Sample ID: 500-174037-10 MSD
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: 2615V2-AI-B10(18-24)
Prep Type: Total/NA
Prep Batch: 518578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.026		0.0960	0.119		mg/Kg	☼	97	75 - 125	4	20

Lab Sample ID: 500-174037-10 DU
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: 2615V2-AI-B10(18-24)
Prep Type: Total/NA
Prep Batch: 518578

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.026		0.0308		mg/Kg	☼	18	20

Lab Sample ID: MB 500-518579/12-A
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/04/19 13:40	12/05/19 08:28	1

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 500-518579/13-A
Matrix: Solid
Analysis Batch: 518921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518579

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.170		mg/Kg		102	80 - 120

Method: 9045D - pH

Lab Sample ID: 500-174037-1 DU
Matrix: Solid
Analysis Batch: 518090

Client Sample ID: 2615V2-AI-B11(0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.1		8.2		SU		0.2	

Lab Sample ID: 500-174037-20 DU
Matrix: Solid
Analysis Batch: 518090

Client Sample ID: 2615V2-AI-B08(18-24)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.6		7.7		SU		0.3	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Date Collected: 11/22/19 09:14

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:14	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:07	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:03	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 08:48	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:19		
					(End)	12/02/19 10:22		
Total/NA	Analysis	Moisture		1	517691	11/27/19 16:16	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B11(0-6)

Lab Sample ID: 500-174037-1

Date Collected: 11/22/19 09:14

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 15:48	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519269	12/07/19 02:06	NRJ	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 14:55	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 09:08	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:31	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:18	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:11	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:07	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 08:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:25		
					(End)	12/02/19 10:28		
Total/NA	Analysis	Moisture		1	517691	11/27/19 16:16	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B11(6-12)

Lab Sample ID: 500-174037-2

Date Collected: 11/22/19 09:28

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 16:14	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519269	12/07/19 02:33	NRJ	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:23	JEF	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:33	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Date Collected: 11/22/19 09:32

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:22	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:16	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:11	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 08:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:28		
					(End)	12/02/19 10:30		
Total/NA	Analysis	Moisture		1	517691	11/27/19 16:16	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(12-18)

Lab Sample ID: 500-174037-3

Date Collected: 11/22/19 09:32

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 16:40	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519269	12/07/19 03:01	NRJ	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:27	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 09:28	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:35	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:26	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:20	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:15	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 08:53	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090	(Start) 12/02/19 10:30 (End) 12/02/19 10:33	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517691	11/27/19 16:16	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 17:06	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519269	12/07/19 03:28	NRJ	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:31	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B11(18-24)

Lab Sample ID: 500-174037-4

Date Collected: 11/22/19 09:40

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 09:32	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:37	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Date Collected: 11/22/19 09:46

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:38	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:24	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:18	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:33		
					(End)	12/02/19 10:36		
Total/NA	Analysis	Moisture		1	517691	11/27/19 16:16	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B11(24-30)

Lab Sample ID: 500-174037-5

Date Collected: 11/22/19 09:46

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 17:31	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 15:30	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:35	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 09:36	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:39	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Date Collected: 11/22/19 10:51

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:42	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:28	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:22	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:04	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:36		
					(End)	12/02/19 10:39		
Total/NA	Analysis	Moisture		1	517691	11/27/19 16:16	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B10(0-6)

Lab Sample ID: 500-174037-6

Date Collected: 11/22/19 10:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 71.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 17:57	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 20:42	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:39	JEF	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:41	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:46	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:33	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:26	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:09	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:39		
					(End)	12/02/19 10:41		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B10(6-12)

Lab Sample ID: 500-174037-7

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 18:23	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 15:54	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:43	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 09:40	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:43	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:51	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:37	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:30	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:10	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:41		
					(End)	12/02/19 10:44		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(6-12)D

Lab Sample ID: 500-174037-8

Date Collected: 11/22/19 11:09

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 18:48	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 16:18	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:47	JEF	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:50	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:55	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:50	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:41	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:12	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:44		
					(End)	12/02/19 10:47		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518572	12/04/19 19:14	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 16:42	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:51	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 09:44	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(12-18)

Lab Sample ID: 500-174037-9

Date Collected: 11/22/19 11:15

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:52	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Date Collected: 11/22/19 11:20

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 04:59	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:54	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:45	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:13	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090	(Start) 12/02/19 10:50 (End) 12/02/19 10:52	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B10(18-24)

Lab Sample ID: 500-174037-10

Date Collected: 11/22/19 11:20

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 12:32	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 17:06	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 15:55	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 10:57	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 07:54	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Date Collected: 11/22/19 11:26

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:03	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 10:59	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:49	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:18	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:52		
					(End)	12/02/19 10:55		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B10(24-30)

Lab Sample ID: 500-174037-11

Date Collected: 11/22/19 11:26

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 12:57	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 17:30	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:07	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:01	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:02	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:07	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:03	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:52	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:20	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:55		
					(End)	12/02/19 10:58		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B09(0-6)

Lab Sample ID: 500-174037-12

Date Collected: 11/22/19 12:38

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 13:23	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 21:06	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:11	JEF	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:04	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Date Collected: 11/22/19 12:43

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:11	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:07	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 18:56	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 10:58		
					(End)	12/02/19 11:01		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(6-12)

Lab Sample ID: 500-174037-13

Date Collected: 11/22/19 12:43

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 13:49	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 21:30	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:15	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:05	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:07	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:15	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:11	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:00	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:27	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090	(Start) 12/02/19 11:01 (End) 12/02/19 11:04	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 14:15	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 17:54	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:19	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(12-18)

Lab Sample ID: 500-174037-14

Date Collected: 11/22/19 12:50

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:09	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:09	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Date Collected: 11/22/19 12:54

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:27	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:16	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:04	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:29	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:04		
					(End)	12/02/19 11:06		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B09(18-24)

Lab Sample ID: 500-174037-15

Date Collected: 11/22/19 12:54

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 14:40	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 18:18	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:23	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:13	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:15	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Date Collected: 11/22/19 13:00

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:32	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:20	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:07	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:30	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:06		
					(End)	12/02/19 11:09		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B09(24-30)

Lab Sample ID: 500-174037-16

Date Collected: 11/22/19 13:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 15:06	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 13:06	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:27	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:17	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:17	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:36	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:24	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:11	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:32	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:09		
					(End)	12/02/19 11:12		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B08(0-6)

Lab Sample ID: 500-174037-17

Date Collected: 11/22/19 13:51

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 15:32	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 13:30	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:31	JEF	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:19	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Date Collected: 11/22/19 14:00

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:40	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:29	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:15	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:34	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:12		
					(End)	12/02/19 11:15		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(6-12)

Lab Sample ID: 500-174037-18

Date Collected: 11/22/19 14:00

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 15:57	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 13:54	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:35	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:21	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:22	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:44	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 11:41	JEF	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:30	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 13:49	FXG	TAL CHI
TCLP	Leach	1311			518428	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:35	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:15		
					(End)	12/02/19 11:17		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 16:22	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 14:18	AJD	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(12-18)

Lab Sample ID: 500-174037-19

Date Collected: 11/22/19 14:05

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:39	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:25	EEN	TAL CHI
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:24	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518426	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518864	12/05/19 08:07	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 05:48	JEF	TAL CHI
TCLP	Leach	1311			518429	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 12:03	JEF	TAL CHI
TCLP	Leach	1311			518429	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 19:49	FXG	TAL CHI
TCLP	Leach	1311			518429	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	3010A			518710	12/04/19 14:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 14:08	FXG	TAL CHI
TCLP	Leach	1311			518429	12/03/19 11:30	GCA	TAL CHI
TCLP	Prep	7470A			518741	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 09:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:20		
					(End)	12/02/19 11:23		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 16:48	PMF	TAL CHI
Total/NA	Prep	3541			519014	12/05/19 16:16	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 14:42	AJD	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 16:43	JEF	TAL CHI
Total/NA	Prep	3050B			518768	12/04/19 17:49	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519201	12/06/19 11:29	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Client Sample ID: 2615V2-AI-B08(18-24)

Lab Sample ID: 500-174037-20

Date Collected: 11/22/19 14:11

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			518578	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:26	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Date Collected: 11/22/19 14:18

Matrix: Solid

Date Received: 11/22/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518427	12/03/19 11:30	GCA	TAL CHI
SPLP East	Prep	3010A			518865	12/05/19 08:11	LMN	TAL CHI
SPLP East	Analysis	6010B		1	519055	12/06/19 03:02	JEF	TAL CHI
TCLP	Leach	1311			518457	12/03/19 13:43	BEC	TAL CHI
TCLP	Prep	3010A			518712	12/04/19 14:48	BDE	TAL CHI
TCLP	Analysis	6010B		1	518950	12/05/19 12:16	JEF	TAL CHI
TCLP	Leach	1311			518457	12/03/19 13:43	BEC	TAL CHI
TCLP	Prep	3010A			518712	12/04/19 14:48	BDE	TAL CHI
TCLP	Analysis	6020A		1	519108	12/05/19 20:00	FXG	TAL CHI
TCLP	Leach	1311			518457	12/03/19 13:43	BEC	TAL CHI
TCLP	Prep	3010A			518712	12/04/19 14:48	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 14:19	FXG	TAL CHI
TCLP	Leach	1311			518457	12/03/19 13:43	BEC	TAL CHI
TCLP	Prep	7470A			518742	12/04/19 16:10	MJG	TAL CHI
TCLP	Analysis	7470A		1	518914	12/05/19 07:59	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 11:26		
					(End)	12/02/19 11:28		
Total/NA	Analysis	Moisture		1	517785	11/29/19 08:30	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B08(24-30)

Lab Sample ID: 500-174037-21

Date Collected: 11/22/19 14:18

Matrix: Solid

Date Received: 11/22/19 15:30

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518540	11/23/19 15:12	WRE	TAL CHI
Total/NA	Analysis	8260B		1	518574	12/04/19 17:13	PMF	TAL CHI
Total/NA	Prep	3541			518838	12/05/19 07:47	DX	TAL CHI
Total/NA	Analysis	8270D		1	519005	12/06/19 01:31	NRJ	TAL CHI
Total/NA	Prep	3050B			518767	12/04/19 17:44	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519054	12/05/19 18:40	JEF	TAL CHI
Total/NA	Prep	3050B			518767	12/04/19 17:44	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519196	12/06/19 11:47	JEF	TAL CHI
Total/NA	Prep	7471B			518579	12/04/19 13:40	MJG	TAL CHI
Total/NA	Analysis	7471B		1	518921	12/05/19 08:32	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174037-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: 500-174037 COC
PO#/Reference# _____



Chain of Custody Record

Lab Job # 500-174037
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler 5.2, 5.8

Client		Client Project #		Preservative		Parameter												Preservative Key	
ELE		1009341-0447.01																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		# of Containers		Matrix												Comments	
176-001-W047E				VOC		SVOC		Total/TeCP		Metals		pH		Percent Solids					
Project Location/State		Lab PM		Date		Time													
Chicago, IL		R. Wright																	
Sampler		Sample ID		Date		Time													
AH																			
1		2615V2-AI-B11(0-6)	11/22/19	0914	5	5	X	X	X	X	X								
2		2615V2-AI-B11(6-12)	11/22/19	0928	5	5	X	X	X	X	X								
3		2615V2-AI-B11(12-18)	11/22/19	0932	5	5	X	X	X	X	X								
4		2615V2-AI-B11(18-24)	11/22/19	0940	5	5	X	X	X	X	X								
5		2615V2-AI-B11(24-30)	11/22/19	0946	5	5	X	X	X	X	X								
6		2615V2-AI-B10(0-6)	11/22/19	1051	5	5	X	X	X	X	X								
7		2615V2-AI-B10(6-12)	11/22/19	1109	5	5	X	X	X	X	X								
8		2615V2-AI-B10(6-12)D	11/22/19	1109	5	5	X	X	X	X	X								
9		2615V2-AI-B10(12-18)	11/22/19	1115	5	5	X	X	X	X	X								
10		2615V2-AI-B10(18-24)	11/22/19	1120	5	5	X	X	X	X	X								

Turnaround Time Required (Business Days) _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <i>[Signature]</i>	Company: ELE	Date: 11/22/19	Time: 1425	Received By: <i>[Signature]</i>	Company: TA	Date: 11/22/19	Time: 1425	Lab Courier: _____
Relinquished By: <i>[Signature]</i>	Company: TA	Date: 11/22/19	Time: 1530	Received By: <i>[Signature]</i>	Company: TA	Date: 11-22-19	Time: 1530	Shipped: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments: _____
Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174037
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Comments		
E+E		1009341.0447.01								Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM				
176-001-W047E		Chicago, IL				A.H., J.H.		R. Wright				
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total/TCLP Metals	pH	Percent Solids	Comments
			Date	Time								
11		2615V2-AI-B10(24-30)	11/22/19	1126	5	S	X	X	X	X	X	
12		2615V2-AI-B09(0-6)	11/22/19	1238	5	S	X	X	X	X	X	
13		2615V2-AI-B09(6-12)	11/22/19	1243	5	S	X	X	X	X	X	
14		2615V2-AI-B09(12-18)	11/22/19	1250	5	S	X	X	X	X	X	
15		2615V2-AI-B09(18-24)	11/22/19	1254	5	S	X	X	X	X	X	
16		2615V2-AI-B09(24-30)	11/22/19	1300	5	S	X	X	X	X	X	
17		2615V2-AI-B08(0-6)	11/22/19	1351	5	S	X	X	X	X	X	
18		2615V2-AI-B08(6-12)	11/22/19	1400	5	S	X	X	X	X	X	
19		2615V2-AI-B08(12-18)	11/22/19	1405	5	S	X	X	X	X	X	
20		2615V2-AI-B08(18-24)	11/22/19	1411	5	S	X	X	X	X	X	

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>E+E</u>	Date: <u>11/22/19</u>	Time: <u>1425</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/22/19</u>	Time: <u>1425</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/22/19</u>	Time: <u>1530</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11-22-19</u>	Time: <u>1530</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: _____
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174037
 Chain of Custody Number: _____
 Page _____ of _____
 Temperature °C of Cooler: _____

Client: <u>E+E</u>		Client Project # <u>1009341.0447.01</u>		Preservative		Parameter		Matrix		Comments	
Project Name <u>176-001-W047E</u>		Lab Project #		Sampling		Total/TCLP		Metals		Percent Solids	
Project Location/State <u>Chicago, IL</u>		Lab PM <u>R. Wright</u>		Date		Time		pH		Other	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/TCLP	Metals	Percent Solids
<u>21</u>		<u>2615V2-AI-B08(24-30)</u>	<u>11/22/19</u>	<u>1418</u>	<u>5</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>J. Hughes</u>	Company <u>E+E</u>	Date <u>11/22/19</u>	Time <u>1425</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11/22/19</u>	Time <u>1425</u>
Relinquished By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11/22/19</u>	Time <u>1530</u>	Received By <u>[Signature]</u>	Company <u>TA</u>	Date <u>11-22-19</u>	Time <u>1530</u>

Lab Courier: _____
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174037-1

Login Number: 174037

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.2,5.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174115-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/11/2019 9:57:19 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Job ID: 500-174115-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174115-1

Comments

No additional comments.

Receipt

The samples were received on 11/25/2019 3:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.7° C and 5.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following samples contained one acid surrogate outside acceptance limits: 2615V2-AI-B21 (18-24) (500-174115-9). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for two analytes: 2,4-Dinitrophenol and Hexachlorocyclopentadiene. The MSD recovered at 0% for the following analyte but recovery was fine in the MS: 4,6-Dinitro-2-methylphenol. Data has been qualified and reported. (500-174115-E-1-K MS) and (500-174115-E-1-L MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.024		0.016	0.0071	mg/Kg	1	*	8260B	Total/NA
2-Methylnaphthalene	0.073	J	0.078	0.0071	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.12		0.038	0.0054	mg/Kg	1	*	8270D	Total/NA
Fluoranthene	0.0072	J	0.038	0.0072	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.019	J	0.038	0.0077	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.033	J	0.038	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.51	J F1	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	7.9	F1	0.59	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	33		0.59	0.067	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.60		0.24	0.055	mg/Kg	1	*	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.086	J B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA
Calcium	56000	B	120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	17	B	0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Cobalt	15		0.29	0.077	mg/Kg	1	*	6010B	Total/NA
Copper	29	F1	0.59	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	*	6010B	Total/NA
Lead	16	F1	0.29	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	26000	B	5.9	2.9	mg/Kg	1	*	6010B	Total/NA
Manganese	360		0.59	0.085	mg/Kg	1	*	6010B	Total/NA
Nickel	39	B	0.59	0.17	mg/Kg	1	*	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	*	6010B	Total/NA
Selenium	0.50	J F1	0.59	0.35	mg/Kg	1	*	6010B	Total/NA
Silver	1.9		0.29	0.076	mg/Kg	1	*	6010B	Total/NA
Sodium	860		59	8.7	mg/Kg	1	*	6010B	Total/NA
Thallium	0.93		0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	*	6010B	Total/NA
Zinc	50		1.2	0.52	mg/Kg	1	*	6010B	Total/NA
Barium	0.47	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.069		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.018	0.0060	mg/Kg	1	*	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.038	J	0.082	0.0075	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.10		0.040	0.0057	mg/Kg	1	*	8270D	Total/NA
Antimony	0.39	J	1.2	0.23	mg/Kg	1	*	6010B	Total/NA
Arsenic	6.7		0.59	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	30		0.59	0.067	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.47		0.23	0.055	mg/Kg	1	*	6010B	Total/NA
Boron	9.3		2.9	0.27	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.074	J B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA
Calcium	49000	B	120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	14	B	0.59	0.29	mg/Kg	1	*	6010B	Total/NA
Cobalt	13		0.29	0.077	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (6-12) (Continued)

Lab Sample ID: 500-174115-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	25		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	34	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.56	J	0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.6		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.81		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	47		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.068	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.016	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.015	J	0.019	0.0084	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.049	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.018	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.52	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	33		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	9.5		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.088	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	15	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	34	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1800		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.74		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.6		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.75		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (12-18) (Continued)

Lab Sample ID: 500-174115-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	47		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.11		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.44	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.9		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	27		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.42		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	9.8		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.074	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	34000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	13	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	21		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	29	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	1.6		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.68		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	40		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.034		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.095		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.027	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.58	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (24-30) (Continued)

Lab Sample ID: 500-174115-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	35		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.095	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	47000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	40	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.80		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.094	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.052		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.073		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.060		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.51	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.9		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	24		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.085	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	16	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	39		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	260		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	44	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.1		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (0-6) (Continued)

Lab Sample ID: 500-174115-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	1.9		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	620		56	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.070		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.12		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.67	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.0		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	19		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.083	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	61000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	35	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.70		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.65		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.091	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.051		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.019	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0084	J	0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.12		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.035	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.55	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.8		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	36	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.58	J	0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		60	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.86		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.76		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.090	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.038		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.016	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.13		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.027	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.59	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.0		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	50000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (18-24) (Continued)

Lab Sample ID: 500-174115-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	22000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	38	B	0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.74		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.092	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.028		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.12		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.51	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.5		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	22		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.068	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	20	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	36	B	0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3600		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.88		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.67		0.61	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.31	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.096	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.039		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (24-30) (Continued)

Lab Sample ID: 500-174115-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.017	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.17		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.58	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.6		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.072	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	19	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	17		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	32		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	45	B	0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.1		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	680		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.053		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.12		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.025	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.033		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.11		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.68	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.1		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.60		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (6-12) (Continued)

Lab Sample ID: 500-174115-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000	B	6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.62	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	36	B	0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.81		0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.77		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.046		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.13		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.70	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.8		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	20		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.060	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	39	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.56	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.72		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (12-18) (Continued)

Lab Sample ID: 500-174115-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.017	J	0.020	0.0065	mg/Kg	1	*	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0096	J	0.018	0.0076	mg/Kg	1	*	8260B	Total/NA
Phenanthrene	0.13		0.041	0.0057	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.034	J	0.041	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.47	J	1.2	0.24	mg/Kg	1	*	6010B	Total/NA
Arsenic	7.1		0.60	0.21	mg/Kg	1	*	6010B	Total/NA
Barium	40		0.60	0.069	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.63		0.24	0.056	mg/Kg	1	*	6010B	Total/NA
Boron	21		3.0	0.28	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.10	J B	0.12	0.022	mg/Kg	1	*	6010B	Total/NA
Calcium	52000	B	120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	19	B	0.60	0.30	mg/Kg	1	*	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	*	6010B	Total/NA
Copper	25		0.60	0.17	mg/Kg	1	*	6010B	Total/NA
Iron	20000		12	6.3	mg/Kg	1	*	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	*	6010B	Total/NA
Magnesium	23000	B	6.0	3.0	mg/Kg	1	*	6010B	Total/NA
Manganese	310		0.60	0.088	mg/Kg	1	*	6010B	Total/NA
Nickel	38	B	0.60	0.18	mg/Kg	1	*	6010B	Total/NA
Potassium	3400		30	11	mg/Kg	1	*	6010B	Total/NA
Silver	2.2		0.30	0.078	mg/Kg	1	*	6010B	Total/NA
Sodium	190		60	8.9	mg/Kg	1	*	6010B	Total/NA
Thallium	1.1		0.60	0.30	mg/Kg	1	*	6010B	Total/NA
Vanadium	24		0.30	0.071	mg/Kg	1	*	6010B	Total/NA
Zinc	58		1.2	0.53	mg/Kg	1	*	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.092	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.032		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.020	0.0066	mg/Kg	1	*	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.017	0.0073	mg/Kg	1	*	8260B	Total/NA
Phenanthrene	0.13		0.041	0.0058	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.025	J	0.041	0.011	mg/Kg	1	*	8270D	Total/NA
Antimony	0.51	J	1.1	0.22	mg/Kg	1	*	6010B	Total/NA
Arsenic	6.4		0.57	0.20	mg/Kg	1	*	6010B	Total/NA
Barium	35		0.57	0.065	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (24-30) (Continued)

Lab Sample ID: 500-174115-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.53		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	11		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16	B	0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	36	B	0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1900		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.78		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.020		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.090		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.1		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	9.2		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	33000	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	17	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	2100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	1.7		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (0-6) (Continued)

Lab Sample ID: 500-174115-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	1000		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.71		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.014	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.024		0.016	0.0068	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.16		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.48	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.8		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	32		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	35	B	0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.81		0.55	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	1.7		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	360		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.84		0.55	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.062		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.018	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.032		0.018	0.0076	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.12		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.74	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.9		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.70		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.036		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.032		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.12		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.030	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.70	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.4		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.092	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	19	B	0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (18-24) (Continued)

Lab Sample ID: 500-174115-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	23000	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	37	B	0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.49	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		61	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.80		0.61	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.31	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.63		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.018	0.0077	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.12		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.64	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.6		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	19		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.092	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	22		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	35	B	0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.67		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.75		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64	F1	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J F1	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J F1	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8	F1	0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.035	F1	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (24-30) (Continued)

Lab Sample ID: 500-174115-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0065	mg/Kg	1	*	7471B	Total/NA
pH	7.3		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174115-1	2615V2-AI-B22 (0-6)	Solid	11/25/19 09:22	11/25/19 15:10	
500-174115-2	2615V2-AI-B22 (6-12)	Solid	11/25/19 09:33	11/25/19 15:10	
500-174115-3	2615V2-AI-B22 (12-18)	Solid	11/25/19 09:40	11/25/19 15:10	
500-174115-4	2615V2-AI-B22 (18-24)	Solid	11/25/19 09:45	11/25/19 15:10	
500-174115-5	2615V2-AI-B22 (24-30)	Solid	11/25/19 09:50	11/25/19 15:10	
500-174115-6	2615V2-AI-B21 (0-6)	Solid	11/25/19 10:40	11/25/19 15:10	
500-174115-7	2615V2-AI-B21 (6-12)	Solid	11/25/19 10:54	11/25/19 15:10	
500-174115-8	2615V2-AI-B21 (12-18)	Solid	11/25/19 10:58	11/25/19 15:10	
500-174115-9	2615V2-AI-B21 (18-24)	Solid	11/25/19 11:08	11/25/19 15:10	
500-174115-10	2615V2-AI-B21 (24-30)	Solid	11/25/19 11:15	11/25/19 15:10	
500-174115-11	2615V2-AI-B20 (0-6)	Solid	11/25/19 12:20	11/25/19 15:10	
500-174115-12	2615V2-AI-B20 (6-12)	Solid	11/25/19 12:30	11/25/19 15:10	
500-174115-13	2615V2-AI-B20 (12-18)	Solid	11/25/19 12:35	11/25/19 15:10	
500-174115-14	2615V2-AI-B20 (18-24)	Solid	11/25/19 12:43	11/25/19 15:10	
500-174115-15	2615V2-AI-B20 (24-30)	Solid	11/25/19 12:49	11/25/19 15:10	
500-174115-16	2615V2-AI-B19 (0-6)	Solid	11/25/19 13:42	11/25/19 15:10	
500-174115-17	2615V2-AI-B19 (6-12)	Solid	11/25/19 13:50	11/25/19 15:10	
500-174115-18	2615V2-AI-B19 (12-18)	Solid	11/25/19 13:55	11/25/19 15:10	
500-174115-19	2615V2-AI-B19 (18-24)	Solid	11/25/19 14:01	11/25/19 15:10	
500-174115-20	2615V2-AI-B19 (24-30)	Solid	11/25/19 14:08	11/25/19 15:10	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Date Collected: 11/25/19 09:22

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Acetone	0.024		0.016	0.0071	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/26/19 19:16	12/05/19 12:55	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/26/19 19:16	12/05/19 12:55	1
Dibromofluoromethane	88		75 - 126	11/26/19 19:16	12/05/19 12:55	1
Toluene-d8 (Surr)	96		75 - 124	11/26/19 19:16	12/05/19 12:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Date Collected: 11/25/19 09:22

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Hexachloroethane	<0.19	F1	0.19	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Nitrobenzene	<0.038		0.038	0.0097	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Naphthalene	<0.038		0.038	0.0060	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Hexachlorocyclopentadiene	<0.78	F1	0.78	0.22	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2-Methylnaphthalene	0.073	J	0.078	0.0071	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2-Nitrophenol	<0.38		0.38	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,4-Dinitrophenol	<0.78	F1	0.78	0.68	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Acenaphthene	<0.038		0.038	0.0070	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Pentachlorophenol	<0.78	F2	0.78	0.62	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
N-Nitrosodiphenylamine	<0.19	F1	0.19	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
4,6-Dinitro-2-methylphenol	<0.78	F1	0.78	0.31	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Phenanthrene	0.12		0.038	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Fluoranthene	0.0072	J	0.038	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Pyrene	0.019	J	0.038	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Benzof[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Date Collected: 11/25/19 09:22

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 83.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.033	J	0.038	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Benzo[b]fluoranthene	<0.038		0.038	0.0084	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Benzo[g,h,i]perylene	<0.038	F1	0.038	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		31 - 166				12/06/19 14:00	12/09/19 04:42	1
Phenol-d5	100		30 - 153				12/06/19 14:00	12/09/19 04:42	1
Nitrobenzene-d5	89		37 - 147				12/06/19 14:00	12/09/19 04:42	1
2-Fluorobiphenyl	92		43 - 145				12/06/19 14:00	12/09/19 04:42	1
2,4,6-Tribromophenol	76		31 - 143				12/06/19 14:00	12/09/19 04:42	1
Terphenyl-d14	100		42 - 157				12/06/19 14:00	12/09/19 04:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J F1	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Arsenic	7.9	F1	0.59	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Barium	33		0.59	0.067	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Beryllium	0.60		0.24	0.055	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Boron	18		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Cadmium	0.086	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Calcium	56000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 18:29	10
Chromium	17	B	0.59	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Cobalt	15		0.29	0.077	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Copper	29	F1	0.59	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Iron	19000		12	6.1	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Lead	16	F1	0.29	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Magnesium	26000	B	5.9	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Manganese	360		0.59	0.085	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Nickel	39	B	0.59	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Potassium	3100		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Selenium	0.50	J F1	0.59	0.35	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Silver	1.9		0.29	0.076	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Sodium	860		59	8.7	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Thallium	0.93		0.59	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 00:47	1
Zinc	50		1.2	0.52	mg/Kg	☼	12/05/19 08:52	12/06/19 18:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.47	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:08	1
Boron	0.063	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Date Collected: 11/25/19 09:22

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 83.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:08	1
Cobalt	0.032		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:08	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:08	1
Manganese	2.3		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:08	1
Nickel	0.069		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:08	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:08	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:08	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.11		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 19:57	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0060	mg/Kg	☼	12/05/19 13:05	12/06/19 07:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/19 15:12	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/26/19 19:16	12/05/19 13:21	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/26/19 19:16	12/05/19 13:21	1
Dibromofluoromethane	87		75 - 126	11/26/19 19:16	12/05/19 13:21	1
Toluene-d8 (Surr)	97		75 - 124	11/26/19 19:16	12/05/19 13:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2-Methylnaphthalene	0.038	J	0.082	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Phenanthrene	0.10		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 04:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		31 - 166	12/06/19 14:00	12/09/19 04:15	1
Phenol-d5	87		30 - 153	12/06/19 14:00	12/09/19 04:15	1
Nitrobenzene-d5	80		37 - 147	12/06/19 14:00	12/09/19 04:15	1
2-Fluorobiphenyl	82		43 - 145	12/06/19 14:00	12/09/19 04:15	1
2,4,6-Tribromophenol	51		31 - 143	12/06/19 14:00	12/09/19 04:15	1
Terphenyl-d14	88		42 - 157	12/06/19 14:00	12/09/19 04:15	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Arsenic	6.7		0.59	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Barium	30		0.59	0.067	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Beryllium	0.47		0.23	0.055	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Boron	9.3		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Cadmium	0.074	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Calcium	49000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 19:21	10
Chromium	14	B	0.59	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Cobalt	13		0.29	0.077	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Copper	25		0.59	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Iron	17000		12	6.1	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Lead	13		0.29	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Magnesium	22000	B	5.9	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Manganese	300		0.59	0.085	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Nickel	34	B	0.59	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Potassium	1700		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Selenium	0.56	J	0.59	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Silver	1.6		0.29	0.076	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Sodium	170		59	8.7	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Thallium	0.81		0.59	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Vanadium	13		0.29	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 01:19	1
Zinc	47		1.2	0.51	mg/Kg	☼	12/05/19 08:52	12/06/19 19:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:13	1
Boron	0.068	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:13	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:13	1
Cobalt	0.017	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:13	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:13	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:13	1
Nickel	0.046		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:13	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:13	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:13	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.016	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:01	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0062	mg/Kg	☼	12/05/19 13:05	12/06/19 07:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/19 15:15	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Acetone	0.015	J	0.019	0.0084	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 13:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/26/19 19:16	12/05/19 13:47	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/26/19 19:16	12/05/19 13:47	1
Dibromofluoromethane	87		75 - 126	11/26/19 19:16	12/05/19 13:47	1
Toluene-d8 (Surr)	96		75 - 124	11/26/19 19:16	12/05/19 13:47	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2-Methylnaphthalene	0.049	J	0.082	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Phenanthrene	0.11		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.022	J	0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
Benzo[g,h,i]perylene	0.018	J	0.040	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	58		31 - 166	12/06/19 14:00	12/09/19 00:02	1
Phenol-d5	68		30 - 153	12/06/19 14:00	12/09/19 00:02	1
Nitrobenzene-d5	82		37 - 147	12/06/19 14:00	12/09/19 00:02	1
2-Fluorobiphenyl	92		43 - 145	12/06/19 14:00	12/09/19 00:02	1
2,4,6-Tribromophenol	52		31 - 143	12/06/19 14:00	12/09/19 00:02	1
Terphenyl-d14	91		42 - 157	12/06/19 14:00	12/09/19 00:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Arsenic	6.4		0.58	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Barium	33		0.58	0.066	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Beryllium	0.40		0.23	0.054	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Boron	9.5		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Cadmium	0.088	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Calcium	53000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 19:30	10
Chromium	15	B	0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Copper	23		0.58	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Iron	17000		12	6.1	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Lead	14		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Magnesium	23000	B	5.8	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Manganese	300		0.58	0.084	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Nickel	34	B	0.58	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Potassium	1800		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Selenium	0.74		0.58	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Silver	1.6		0.29	0.075	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Sodium	160		58	8.6	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Thallium	0.75		0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Vanadium	14		0.29	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 01:23	1
Zinc	47		1.2	0.51	mg/Kg	☼	12/05/19 08:52	12/06/19 19:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.76		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:17	1
Boron	0.089	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:17	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:17	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:17	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:17	1
Manganese	1.9		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:17	1
Nickel	0.042		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:17	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:17	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:17	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:05	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:23	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.019	0.0064	mg/Kg	☼	12/05/19 13:05	12/06/19 07:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/19 15:18	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/26/19 19:16	12/05/19 14:13	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/26/19 19:16	12/05/19 14:13	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 14:13	1
Toluene-d8 (Surr)	98		75 - 124	11/26/19 19:16	12/05/19 14:13	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Phenanthrene	0.11		0.041	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 00:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166				12/06/19 14:00	12/09/19 00:25	1
Phenol-d5	75		30 - 153				12/06/19 14:00	12/09/19 00:25	1
Nitrobenzene-d5	90		37 - 147				12/06/19 14:00	12/09/19 00:25	1
2-Fluorobiphenyl	100		43 - 145				12/06/19 14:00	12/09/19 00:25	1
2,4,6-Tribromophenol	65		31 - 143				12/06/19 14:00	12/09/19 00:25	1
Terphenyl-d14	101		42 - 157				12/06/19 14:00	12/09/19 00:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Arsenic	5.9		0.59	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Barium	27		0.59	0.067	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Beryllium	0.42		0.23	0.055	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Boron	9.8		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Cadmium	0.074	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Calcium	34000	B	12	2.0	mg/Kg	☼	12/05/19 08:52	12/06/19 19:35	1
Chromium	13	B	0.59	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Cobalt	11		0.29	0.077	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Copper	21		0.59	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Iron	15000		12	6.1	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Lead	12		0.29	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Magnesium	19000	B	5.9	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Manganese	250		0.59	0.085	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Nickel	29	B	0.59	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Potassium	1700		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Selenium	0.68		0.59	0.35	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Silver	1.6		0.29	0.076	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Sodium	140		59	8.7	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Thallium	0.68		0.59	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Vanadium	13		0.29	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 01:27	1
Zinc	40		1.2	0.52	mg/Kg	☼	12/05/19 08:52	12/06/19 19:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:22	1
Boron	0.13	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:22	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:22	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:22	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:22	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:22	1
Nickel	0.042		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:22	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:22	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:22	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:22	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.034		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:09	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 07:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/02/19 15:23	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/26/19 19:16	12/05/19 14:39	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/26/19 19:16	12/05/19 14:39	1
Dibromofluoromethane	88		75 - 126	11/26/19 19:16	12/05/19 14:39	1
Toluene-d8 (Surr)	97		75 - 124	11/26/19 19:16	12/05/19 14:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Hexachlorobenzene	<0.081		0.081	0.0094	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Phenanthrene	0.095		0.040	0.0056	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Benzof[anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.027	J	0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 00:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				12/06/19 14:00	12/09/19 00:48	1
Phenol-d5	69		30 - 153				12/06/19 14:00	12/09/19 00:48	1
Nitrobenzene-d5	80		37 - 147				12/06/19 14:00	12/09/19 00:48	1
2-Fluorobiphenyl	91		43 - 145				12/06/19 14:00	12/09/19 00:48	1
2,4,6-Tribromophenol	55		31 - 143				12/06/19 14:00	12/09/19 00:48	1
Terphenyl-d14	98		42 - 157				12/06/19 14:00	12/09/19 00:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Arsenic	8.0		0.58	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Barium	35		0.58	0.066	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Beryllium	0.59		0.23	0.054	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Boron	17		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Cadmium	0.095	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Calcium	47000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 19:57	10
Chromium	17	B	0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Cobalt	15		0.29	0.076	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Copper	30		0.58	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Iron	20000		12	6.0	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Lead	16		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Magnesium	21000	B	5.8	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Manganese	290		0.58	0.084	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Nickel	40	B	0.58	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Potassium	2900		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Selenium	0.80		0.58	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Silver	1.9		0.29	0.075	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Sodium	180		58	8.6	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Thallium	1.2		0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Vanadium	20		0.29	0.068	mg/Kg	☼	12/05/19 08:52	12/06/19 01:31	1
Zinc	54		1.2	0.51	mg/Kg	☼	12/05/19 08:52	12/06/19 19:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:40	1
Boron	0.094	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:40	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:40	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:40	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:40	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:40	1
Nickel	0.035		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:40	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:40	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:40	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:40	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.052		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0061	mg/Kg	☼	12/05/19 13:05	12/06/19 07:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/02/19 15:29	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/26/19 19:16	12/05/19 15:04	1
4-Bromofluorobenzene (Surr)	126		75 - 131	11/26/19 19:16	12/05/19 15:04	1
Dibromofluoromethane	90		75 - 126	11/26/19 19:16	12/05/19 15:04	1
Toluene-d8 (Surr)	102		75 - 124	11/26/19 19:16	12/05/19 15:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Phenanthrene	0.073		0.037	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Benzof[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.060		0.037	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 01:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		31 - 166				12/06/19 14:00	12/09/19 01:11	1
Phenol-d5	76		30 - 153				12/06/19 14:00	12/09/19 01:11	1
Nitrobenzene-d5	88		37 - 147				12/06/19 14:00	12/09/19 01:11	1
2-Fluorobiphenyl	98		43 - 145				12/06/19 14:00	12/09/19 01:11	1
2,4,6-Tribromophenol	79		31 - 143				12/06/19 14:00	12/09/19 01:11	1
Terphenyl-d14	104		42 - 157				12/06/19 14:00	12/09/19 01:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.1	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Arsenic	8.9		0.56	0.19	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Barium	24		0.56	0.064	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Beryllium	0.61		0.22	0.052	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Boron	18		2.8	0.26	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Cadmium	0.085	J B	0.11	0.020	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Calcium	28000	B	11	1.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Chromium	16	B	0.56	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Cobalt	16		0.28	0.073	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Copper	39		0.56	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Iron	20000		11	5.8	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Lead	19		0.28	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Magnesium	19000	B	5.6	2.8	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Manganese	260		0.56	0.081	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Nickel	44	B	0.56	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Potassium	2900		28	9.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Selenium	1.1		0.56	0.33	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Silver	1.9		0.28	0.072	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Sodium	620		56	8.2	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Thallium	1.4		0.56	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Vanadium	20		0.28	0.066	mg/Kg	☼	12/05/19 08:52	12/06/19 01:35	1
Zinc	46		1.1	0.49	mg/Kg	☼	12/05/19 08:52	12/06/19 20:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.35	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:45	1
Boron	0.082	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 87.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:45	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:45	1
Cobalt	0.026		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:45	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:45	1
Manganese	1.6		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:45	1
Nickel	0.042		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:45	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:45	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:45	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:45	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.070		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017	0.0057	mg/Kg	☼	12/05/19 13:05	12/06/19 07:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/02/19 15:32	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Date Collected: 11/25/19 10:54

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Carbon disulfide	<0.0042		0.0042	0.00086	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Vinyl acetate	<0.0042		0.0042	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/26/19 19:16	12/05/19 15:30	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/26/19 19:16	12/05/19 15:30	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 15:30	1
Toluene-d8 (Surr)	98		75 - 124	11/26/19 19:16	12/05/19 15:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Date Collected: 11/25/19 10:54

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Phenanthrene	0.12		0.039	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Benzof[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Date Collected: 11/25/19 10:54

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 01:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		31 - 166	12/06/19 14:00	12/09/19 01:34	1
Phenol-d5	71		30 - 153	12/06/19 14:00	12/09/19 01:34	1
Nitrobenzene-d5	82		37 - 147	12/06/19 14:00	12/09/19 01:34	1
2-Fluorobiphenyl	94		43 - 145	12/06/19 14:00	12/09/19 01:34	1
2,4,6-Tribromophenol	53		31 - 143	12/06/19 14:00	12/09/19 01:34	1
Terphenyl-d14	99		42 - 157	12/06/19 14:00	12/09/19 01:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.67	J	1.1	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Arsenic	7.0		0.56	0.19	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Barium	38		0.56	0.064	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Beryllium	0.59		0.22	0.052	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Boron	19		2.8	0.26	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Cadmium	0.083	J B	0.11	0.020	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Calcium	61000	B	110	19	mg/Kg	☼	12/05/19 08:52	12/06/19 20:10	10
Chromium	18	B	0.56	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Cobalt	13		0.28	0.073	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Copper	25		0.56	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Iron	19000		11	5.8	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Lead	14		0.28	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Magnesium	24000	B	5.6	2.8	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Manganese	310		0.56	0.081	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Nickel	35	B	0.56	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Potassium	3300		28	9.9	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Selenium	0.70		0.56	0.33	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Silver	2.0		0.28	0.072	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Sodium	210		56	8.3	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Thallium	0.65		0.56	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Vanadium	22		0.28	0.066	mg/Kg	☼	12/05/19 08:52	12/06/19 01:39	1
Zinc	51		1.1	0.49	mg/Kg	☼	12/05/19 08:52	12/06/19 20:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:49	1
Boron	0.091	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Date Collected: 11/25/19 10:54

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:49	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:49	1
Cobalt	0.017	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:49	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:49	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:49	1
Nickel	0.051		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:49	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:49	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:49	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:49	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.019	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:21	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0064	mg/Kg	☼	12/05/19 13:05	12/06/19 07:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/02/19 15:35	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Acetone	0.0084	J	0.019	0.0081	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/26/19 19:16	12/05/19 15:56	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/26/19 19:16	12/05/19 15:56	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 15:56	1
Toluene-d8 (Surr)	96		75 - 124	11/26/19 19:16	12/05/19 15:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2-Methylnaphthalene	<0.082		0.082	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Phenanthrene	0.12		0.040	0.0056	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.035	J	0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 01:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				12/06/19 14:00	12/09/19 01:56	1
Phenol-d5	80		30 - 153				12/06/19 14:00	12/09/19 01:56	1
Nitrobenzene-d5	87		37 - 147				12/06/19 14:00	12/09/19 01:56	1
2-Fluorobiphenyl	105		43 - 145				12/06/19 14:00	12/09/19 01:56	1
2,4,6-Tribromophenol	71		31 - 143				12/06/19 14:00	12/09/19 01:56	1
Terphenyl-d14	119		42 - 157				12/06/19 14:00	12/09/19 01:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Arsenic	9.8		0.60	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Barium	39		0.60	0.068	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Beryllium	0.67		0.24	0.056	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Boron	19		3.0	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Calcium	52000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 20:19	10
Chromium	18	B	0.60	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Copper	25		0.60	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Iron	19000		12	6.2	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Lead	14		0.30	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Magnesium	23000	B	6.0	3.0	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Manganese	310		0.60	0.087	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Nickel	36	B	0.60	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Potassium	3300		30	11	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Selenium	0.58	J	0.60	0.35	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Silver	2.1		0.30	0.077	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Sodium	180		60	8.8	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Thallium	0.86		0.60	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Vanadium	22		0.30	0.070	mg/Kg	☼	12/05/19 08:52	12/06/19 01:43	1
Zinc	54		1.2	0.52	mg/Kg	☼	12/05/19 08:52	12/06/19 20:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.76		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:54	1
Boron	0.090	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:54	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:54	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:54	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:54	1
Manganese	1.9		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:54	1
Nickel	0.038		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:54	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:54	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:54	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.016	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:25	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 07:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/02/19 15:37	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	11/26/19 19:16	12/05/19 16:22	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/26/19 19:16	12/05/19 16:22	1
Dibromofluoromethane	88		75 - 126	11/26/19 19:16	12/05/19 16:22	1
Toluene-d8 (Surr)	97		75 - 124	11/26/19 19:16	12/05/19 16:22	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Phenanthrene	0.13		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.027	J	0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	53		31 - 166				12/06/19 14:00	12/09/19 02:19	1
Phenol-d5	22	X	30 - 153				12/06/19 14:00	12/09/19 02:19	1
Nitrobenzene-d5	47		37 - 147				12/06/19 14:00	12/09/19 02:19	1
2-Fluorobiphenyl	65		43 - 145				12/06/19 14:00	12/09/19 02:19	1
2,4,6-Tribromophenol	54		31 - 143				12/06/19 14:00	12/09/19 02:19	1
Terphenyl-d14	94		42 - 157				12/06/19 14:00	12/09/19 02:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.1	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Arsenic	7.0		0.57	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Barium	39		0.57	0.065	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Beryllium	0.68		0.23	0.054	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Boron	21		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Cadmium	0.12	B	0.11	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Calcium	50000	B	110	19	mg/Kg	☼	12/05/19 08:52	12/06/19 20:28	10
Chromium	19	B	0.57	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Cobalt	14		0.29	0.075	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Copper	26		0.57	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Iron	20000		11	6.0	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Lead	14		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Magnesium	22000	B	5.7	2.8	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Manganese	310		0.57	0.083	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Nickel	38	B	0.57	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Potassium	3400		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Selenium	0.74		0.57	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Silver	2.2		0.29	0.074	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Sodium	200		57	8.5	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Thallium	0.90		0.57	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Vanadium	23		0.29	0.068	mg/Kg	☼	12/05/19 08:52	12/06/19 01:47	1
Zinc	59		1.1	0.50	mg/Kg	☼	12/05/19 08:52	12/06/19 20:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 01:59	1
Boron	0.092	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 01:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 01:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:59	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:59	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 01:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 01:59	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:59	1
Nickel	0.040		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 01:59	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 01:59	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 01:59	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:37	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.020	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 08:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/02/19 15:40	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Acetone	<0.021		0.021	0.0090	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1
Xylenes, Total	<0.0042		0.0042	0.00066	mg/Kg	☼	11/26/19 19:16	12/05/19 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/26/19 19:16	12/05/19 16:48	1
4-Bromofluorobenzene (Surr)	100		75 - 131	11/26/19 19:16	12/05/19 16:48	1
Dibromofluoromethane	87		75 - 126	11/26/19 19:16	12/05/19 16:48	1
Toluene-d8 (Surr)	97		75 - 124	11/26/19 19:16	12/05/19 16:48	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 02:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				12/06/19 14:00	12/09/19 02:42	1
Phenol-d5	71		30 - 153				12/06/19 14:00	12/09/19 02:42	1
Nitrobenzene-d5	78		37 - 147				12/06/19 14:00	12/09/19 02:42	1
2-Fluorobiphenyl	91		43 - 145				12/06/19 14:00	12/09/19 02:42	1
2,4,6-Tribromophenol	70		31 - 143				12/06/19 14:00	12/09/19 02:42	1
Terphenyl-d14	106		42 - 157				12/06/19 14:00	12/09/19 02:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.2	0.24	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Arsenic	6.5		0.61	0.21	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Barium	43		0.61	0.070	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Beryllium	0.73		0.24	0.057	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Boron	22		3.1	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Cadmium	0.068	J B	0.12	0.022	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Calcium	55000	B	120	21	mg/Kg	☼	12/05/19 08:52	12/06/19 20:50	10
Chromium	20	B	0.61	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Cobalt	14		0.31	0.080	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Copper	22		0.61	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Iron	20000		12	6.4	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Lead	14		0.31	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Magnesium	22000	B	6.1	3.0	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Manganese	300		0.61	0.089	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Nickel	36	B	0.61	0.18	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Potassium	3600		31	11	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Selenium	0.88		0.61	0.36	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Silver	2.2		0.31	0.079	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Sodium	210		61	9.1	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Thallium	0.67		0.61	0.31	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Vanadium	24		0.31	0.072	mg/Kg	☼	12/05/19 08:52	12/06/19 01:51	1
Zinc	49		1.2	0.54	mg/Kg	☼	12/05/19 08:52	12/06/19 20:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:04	1
Boron	0.096	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:04	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:04	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:04	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:04	1
Nickel	0.036		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:04	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:04	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:04	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.039		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:41	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:57	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.020	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 08:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/19 15:43	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Chlorobenzene	<0.0017		0.0017	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Tetrachloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/26/19 19:16	12/05/19 17:14	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/26/19 19:16	12/05/19 17:14	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 17:14	1
Toluene-d8 (Surr)	97		75 - 124	11/26/19 19:16	12/05/19 17:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Phenanthrene	0.17		0.038	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Pyrene	<0.038		0.038	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Benzof[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 03:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	59		31 - 166				12/06/19 14:00	12/09/19 03:05	1
Phenol-d5	70		30 - 153				12/06/19 14:00	12/09/19 03:05	1
Nitrobenzene-d5	77		37 - 147				12/06/19 14:00	12/09/19 03:05	1
2-Fluorobiphenyl	95		43 - 145				12/06/19 14:00	12/09/19 03:05	1
2,4,6-Tribromophenol	68		31 - 143				12/06/19 14:00	12/09/19 03:05	1
Terphenyl-d14	101		42 - 157				12/06/19 14:00	12/09/19 03:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.1	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Arsenic	8.6		0.57	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Barium	32		0.57	0.065	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Beryllium	0.71		0.23	0.053	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Boron	18		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Cadmium	0.072	J B	0.11	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Calcium	30000	B	11	1.9	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Chromium	19	B	0.57	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Cobalt	17		0.29	0.075	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Copper	32		0.57	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Iron	20000		11	5.9	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Lead	18		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Magnesium	18000	B	5.7	2.8	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Manganese	280		0.57	0.083	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Nickel	45	B	0.57	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Potassium	3300		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Selenium	1.1		0.57	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Silver	2.0		0.29	0.074	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Sodium	680		57	8.4	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Thallium	1.0		0.57	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Vanadium	22		0.29	0.067	mg/Kg	☼	12/05/19 08:52	12/06/19 02:04	1
Zinc	51		1.1	0.50	mg/Kg	☼	12/05/19 08:52	12/06/19 20:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:08	1
Boron	0.084	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:08	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:08	1
Cobalt	0.053		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:08	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:08	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:08	1
Manganese	2.2		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:08	1
Nickel	0.12		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:08	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:08	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:08	1
Zinc	0.025	J	0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:08	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:46	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:46	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018	0.0060	mg/Kg	☼	12/05/19 13:05	12/06/19 08:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/02/19 15:46	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Date Collected: 11/25/19 12:30

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Acetone	0.012	J	0.017	0.0074	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/26/19 19:16	12/05/19 17:39	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/26/19 19:16	12/05/19 17:39	1
Dibromofluoromethane	90		75 - 126	11/26/19 19:16	12/05/19 17:39	1
Toluene-d8 (Surr)	96		75 - 124	11/26/19 19:16	12/05/19 17:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Date Collected: 11/25/19 12:30

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Phenanthrene	0.11		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Date Collected: 11/25/19 12:30

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		31 - 166	12/06/19 14:00	12/09/19 03:28	1
Phenol-d5	69		30 - 153	12/06/19 14:00	12/09/19 03:28	1
Nitrobenzene-d5	77		37 - 147	12/06/19 14:00	12/09/19 03:28	1
2-Fluorobiphenyl	93		43 - 145	12/06/19 14:00	12/09/19 03:28	1
2,4,6-Tribromophenol	60		31 - 143	12/06/19 14:00	12/09/19 03:28	1
Terphenyl-d14	103		42 - 157	12/06/19 14:00	12/09/19 03:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J	1.2	0.24	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Arsenic	7.1		0.62	0.21	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Barium	40		0.62	0.070	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Beryllium	0.60		0.25	0.058	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Boron	19		3.1	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Cadmium	0.20	B	0.12	0.022	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Calcium	57000	B	120	21	mg/Kg	☼	12/05/19 08:52	12/06/19 21:04	10
Chromium	19	B	0.62	0.31	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Cobalt	14		0.31	0.081	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Copper	25		0.62	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Iron	20000		12	6.4	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Lead	14		0.31	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Magnesium	25000	B	6.2	3.1	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Manganese	320		0.62	0.089	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Nickel	36	B	0.62	0.18	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Potassium	3400		31	11	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Selenium	0.81		0.62	0.36	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Silver	2.2		0.31	0.080	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Sodium	190		62	9.1	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Thallium	1.1		0.62	0.31	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Vanadium	23		0.31	0.073	mg/Kg	☼	12/05/19 08:52	12/06/19 02:08	1
Zinc	58		1.2	0.54	mg/Kg	☼	12/05/19 08:52	12/06/19 20:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.77		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:13	1
Boron	0.099	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Date Collected: 11/25/19 12:30

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:13	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:13	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:13	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:13	1
Manganese	1.9		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:13	1
Nickel	0.046		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:13	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:13	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:13	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.030		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:05	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.019	0.0064	mg/Kg	☼	12/05/19 13:05	12/06/19 08:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/02/19 15:48	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Date Collected: 11/25/19 12:35

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Chlorobenzene	<0.0017		0.0017	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Tetrachloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/26/19 19:16	12/05/19 18:05	1
4-Bromofluorobenzene (Surr)	100		75 - 131	11/26/19 19:16	12/05/19 18:05	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 18:05	1
Toluene-d8 (Surr)	95		75 - 124	11/26/19 19:16	12/05/19 18:05	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Date Collected: 11/25/19 12:35

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Phenanthrene	0.13		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Date Collected: 11/25/19 12:35

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 03:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		31 - 166				12/06/19 14:00	12/09/19 03:51	1
Phenol-d5	72		30 - 153				12/06/19 14:00	12/09/19 03:51	1
Nitrobenzene-d5	83		37 - 147				12/06/19 14:00	12/09/19 03:51	1
2-Fluorobiphenyl	104		43 - 145				12/06/19 14:00	12/09/19 03:51	1
2,4,6-Tribromophenol	67		31 - 143				12/06/19 14:00	12/09/19 03:51	1
Terphenyl-d14	109		42 - 157				12/06/19 14:00	12/09/19 03:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	1.2	0.23	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Arsenic	6.8		0.58	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Barium	39		0.58	0.067	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Beryllium	0.62		0.23	0.055	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Boron	20		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Cadmium	0.060	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Calcium	53000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 21:13	10
Chromium	19	B	0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Cobalt	14		0.29	0.077	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Copper	24		0.58	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Iron	20000		12	6.1	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Lead	15		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Magnesium	23000	B	5.8	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Manganese	310		0.58	0.085	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Nickel	39	B	0.58	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Potassium	3400		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Selenium	0.56	J	0.58	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Silver	2.1		0.29	0.075	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Sodium	180		58	8.6	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Thallium	0.71		0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Vanadium	23		0.29	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 02:12	1
Zinc	51		1.2	0.51	mg/Kg	☼	12/05/19 08:52	12/06/19 21:08	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.72		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:18	1
Boron	0.084	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Date Collected: 11/25/19 12:35

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:18	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:18	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:18	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:18	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:18	1
Nickel	0.036		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:18	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:18	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:18	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:09	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.020	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/02/19 15:54	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Acetone	0.0096	J	0.018	0.0076	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/26/19 19:16	12/05/19 18:31	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/26/19 19:16	12/05/19 18:31	1
Dibromofluoromethane	93		75 - 126	11/26/19 19:16	12/05/19 18:31	1
Toluene-d8 (Surr)	94		75 - 124	11/26/19 19:16	12/05/19 18:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Phenanthrene	0.13		0.041	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 04:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	51		31 - 166				12/06/19 14:00	12/09/19 04:13	1
Phenol-d5	64		30 - 153				12/06/19 14:00	12/09/19 04:13	1
Nitrobenzene-d5	68		37 - 147				12/06/19 14:00	12/09/19 04:13	1
2-Fluorobiphenyl	90		43 - 145				12/06/19 14:00	12/09/19 04:13	1
2,4,6-Tribromophenol	64		31 - 143				12/06/19 14:00	12/09/19 04:13	1
Terphenyl-d14	100		42 - 157				12/06/19 14:00	12/09/19 04:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.47	J	1.2	0.24	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Arsenic	7.1		0.60	0.21	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Barium	40		0.60	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Beryllium	0.63		0.24	0.056	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Boron	21		3.0	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Cadmium	0.10	J B	0.12	0.022	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Calcium	52000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 21:21	10
Chromium	19	B	0.60	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Cobalt	14		0.30	0.079	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Copper	25		0.60	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Iron	20000		12	6.3	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Lead	14		0.30	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Magnesium	23000	B	6.0	3.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Manganese	310		0.60	0.088	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Nickel	38	B	0.60	0.18	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Potassium	3400		30	11	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Selenium	<0.60		0.60	0.36	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Silver	2.2		0.30	0.078	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Sodium	190		60	8.9	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Thallium	1.1		0.60	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Vanadium	24		0.30	0.071	mg/Kg	☼	12/05/19 08:52	12/06/19 02:16	1
Zinc	58		1.2	0.53	mg/Kg	☼	12/05/19 08:52	12/06/19 21:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:22	1
Boron	0.092	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:22	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:22	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:22	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:22	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:22	1
Nickel	0.032		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:22	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:22	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:22	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:22	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 20:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:12	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.020	0.0066	mg/Kg	☼	12/05/19 13:05	12/06/19 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 15:57	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Acetone	0.011	J	0.017	0.0073	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/26/19 19:16	12/05/19 18:57	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/26/19 19:16	12/05/19 18:57	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 18:57	1
Toluene-d8 (Surr)	97		75 - 124	11/26/19 19:16	12/05/19 18:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Phenanthrene	0.13		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.025	J	0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 04:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	62		31 - 166				12/06/19 14:00	12/09/19 04:36	1
Phenol-d5	74		30 - 153				12/06/19 14:00	12/09/19 04:36	1
Nitrobenzene-d5	80		37 - 147				12/06/19 14:00	12/09/19 04:36	1
2-Fluorobiphenyl	100		43 - 145				12/06/19 14:00	12/09/19 04:36	1
2,4,6-Tribromophenol	78		31 - 143				12/06/19 14:00	12/09/19 04:36	1
Terphenyl-d14	103		42 - 157				12/06/19 14:00	12/09/19 04:36	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.1	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Arsenic	6.4		0.57	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Barium	35		0.57	0.065	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Beryllium	0.53		0.23	0.054	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Boron	11		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Cadmium	0.10	J B	0.11	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Calcium	51000	B	110	19	mg/Kg	☼	12/05/19 08:52	12/06/19 21:39	10
Chromium	16	B	0.57	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Cobalt	13		0.29	0.075	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Copper	27		0.57	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Iron	18000		11	6.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Lead	14		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Magnesium	22000	B	5.7	2.8	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Manganese	310		0.57	0.083	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Nickel	36	B	0.57	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Potassium	1900		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Selenium	0.59		0.57	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Silver	1.8		0.29	0.074	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Sodium	170		57	8.5	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Thallium	0.78		0.57	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Vanadium	15		0.29	0.068	mg/Kg	☼	12/05/19 08:52	12/06/19 02:20	1
Zinc	51		1.1	0.50	mg/Kg	☼	12/05/19 08:52	12/06/19 21:26	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:36	1
Boron	0.095	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:36	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:36	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:36	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:36	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:36	1
Nickel	0.033		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:36	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:36	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:36	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:36	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 21:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0063	mg/Kg	☼	12/05/19 13:05	12/06/19 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 15:59	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Acetone	0.020		0.017	0.0076	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/26/19 19:16	12/05/19 19:23	1
4-Bromofluorobenzene (Surr)	111		75 - 131	11/26/19 19:16	12/05/19 19:23	1
Dibromofluoromethane	93		75 - 126	11/26/19 19:16	12/05/19 19:23	1
Toluene-d8 (Surr)	96		75 - 124	11/26/19 19:16	12/05/19 19:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Phenanthrene	0.090		0.039	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Benzof[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 81.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 04:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	54		31 - 166				12/06/19 14:00	12/09/19 04:59	1
Phenol-d5	68		30 - 153				12/06/19 14:00	12/09/19 04:59	1
Nitrobenzene-d5	68		37 - 147				12/06/19 14:00	12/09/19 04:59	1
2-Fluorobiphenyl	87		43 - 145				12/06/19 14:00	12/09/19 04:59	1
2,4,6-Tribromophenol	89		31 - 143				12/06/19 14:00	12/09/19 04:59	1
Terphenyl-d14	97		42 - 157				12/06/19 14:00	12/09/19 04:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.2	0.24	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Arsenic	5.1		0.61	0.21	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Barium	35		0.61	0.069	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Beryllium	0.49		0.24	0.057	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Boron	9.2		3.0	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Cadmium	0.090	J B	0.12	0.022	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Calcium	33000	B	12	2.1	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Chromium	17	B	0.61	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Cobalt	14		0.30	0.080	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Copper	23		0.61	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Iron	16000		12	6.3	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Lead	15		0.30	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Magnesium	20000	B	6.1	3.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Manganese	280		0.61	0.088	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Nickel	37	B	0.61	0.18	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Potassium	2100		30	11	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Selenium	0.48	J	0.61	0.36	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Silver	1.7		0.30	0.078	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Sodium	1000		61	9.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Thallium	1.0		0.61	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Vanadium	14		0.30	0.072	mg/Kg	☼	12/05/19 08:52	12/06/19 02:24	1
Zinc	43		1.2	0.53	mg/Kg	☼	12/05/19 08:52	12/06/19 21:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.71		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:41	1
Boron	0.053	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 81.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:41	1
Cobalt	0.035		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:41	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:41	1
Manganese	2.7		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:41	1
Nickel	0.055		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:41	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:41	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.7		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 21:06	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.019	0.0063	mg/Kg	☼	12/05/19 13:05	12/06/19 08:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			12/02/19 16:02	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Acetone	0.024		0.016	0.0068	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/26/19 19:16	12/05/19 19:49	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/26/19 19:16	12/05/19 19:49	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 19:49	1
Toluene-d8 (Surr)	96		75 - 124	11/26/19 19:16	12/05/19 19:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Phenanthrene	0.16		0.039	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 05:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	58		31 - 166				12/06/19 14:00	12/09/19 05:22	1
Phenol-d5	68		30 - 153				12/06/19 14:00	12/09/19 05:22	1
Nitrobenzene-d5	75		37 - 147				12/06/19 14:00	12/09/19 05:22	1
2-Fluorobiphenyl	89		43 - 145				12/06/19 14:00	12/09/19 05:22	1
2,4,6-Tribromophenol	75		31 - 143				12/06/19 14:00	12/09/19 05:22	1
Terphenyl-d14	91		42 - 157				12/06/19 14:00	12/09/19 05:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.1	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Arsenic	6.8		0.55	0.19	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Barium	32		0.55	0.063	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Beryllium	0.64		0.22	0.052	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Boron	17		2.8	0.26	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Cadmium	0.10	J B	0.11	0.020	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Calcium	52000	B	110	19	mg/Kg	☼	12/05/19 08:52	12/06/19 21:53	10
Chromium	17	B	0.55	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Cobalt	13		0.28	0.073	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Copper	26		0.55	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Iron	19000		11	5.8	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Lead	14		0.28	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Magnesium	23000	B	5.5	2.7	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Manganese	310		0.55	0.080	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Nickel	35	B	0.55	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Potassium	2900		28	9.8	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Selenium	0.81		0.55	0.33	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Silver	1.7		0.28	0.071	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Sodium	360		55	8.2	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Thallium	0.84		0.55	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Vanadium	20		0.28	0.065	mg/Kg	☼	12/05/19 08:52	12/06/19 02:28	1
Zinc	49		1.1	0.49	mg/Kg	☼	12/05/19 08:52	12/06/19 21:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:46	1
Boron	0.11	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:46	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:46	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:46	1
Cobalt	0.028		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:46	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:46	1
Manganese	2.0		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:46	1
Nickel	0.062		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:46	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:46	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:46	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.018	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 21:10	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.018	0.0059	mg/Kg	☼	12/05/19 13:05	12/06/19 08:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3		0.2	0.2	SU			12/02/19 16:05	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Acetone	0.032		0.018	0.0076	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Vinyl chloride	<0.0018		0.0018	0.00077	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/26/19 19:16	12/05/19 20:14	1
4-Bromofluorobenzene (Surr)	102		75 - 131	11/26/19 19:16	12/05/19 20:14	1
Dibromofluoromethane	89		75 - 126	11/26/19 19:16	12/05/19 20:14	1
Toluene-d8 (Surr)	94		75 - 124	11/26/19 19:16	12/05/19 20:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Phenanthrene	0.12		0.040	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 05:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	67		31 - 166				12/06/19 14:00	12/09/19 05:45	1
Phenol-d5	76		30 - 153				12/06/19 14:00	12/09/19 05:45	1
Nitrobenzene-d5	82		37 - 147				12/06/19 14:00	12/09/19 05:45	1
2-Fluorobiphenyl	100		43 - 145				12/06/19 14:00	12/09/19 05:45	1
2,4,6-Tribromophenol	79		31 - 143				12/06/19 14:00	12/09/19 05:45	1
Terphenyl-d14	103		42 - 157				12/06/19 14:00	12/09/19 05:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.2	0.24	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Arsenic	7.9		0.61	0.21	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Barium	38		0.61	0.070	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Beryllium	0.65		0.24	0.057	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Boron	19		3.0	0.28	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Cadmium	0.11	J B	0.12	0.022	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Calcium	51000	B	120	21	mg/Kg	☼	12/05/19 08:52	12/06/19 22:01	10
Chromium	19	B	0.61	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Cobalt	14		0.30	0.080	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Copper	25		0.61	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Iron	20000		12	6.3	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Lead	14		0.30	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Magnesium	23000	B	6.1	3.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Manganese	320		0.61	0.088	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Nickel	37	B	0.61	0.18	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Potassium	3300		30	11	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Selenium	0.47	J	0.61	0.36	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Silver	2.0		0.30	0.079	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Sodium	230		61	9.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Thallium	1.0		0.61	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Vanadium	22		0.30	0.072	mg/Kg	☼	12/05/19 08:52	12/06/19 02:32	1
Zinc	56		1.2	0.54	mg/Kg	☼	12/05/19 08:52	12/06/19 21:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.70		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:50	1
Boron	0.12	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:50	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:50	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:50	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:50	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:50	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:50	1
Nickel	0.036		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:50	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:50	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:50	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:50	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.032		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 21:14	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 13:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.020	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 08:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			12/02/19 16:08	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Date Collected: 11/25/19 14:01

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	11/26/19 19:16	12/05/19 11:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/26/19 19:16	12/05/19 11:42	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/26/19 19:16	12/05/19 11:42	1
Dibromofluoromethane	95		75 - 126	11/26/19 19:16	12/05/19 11:42	1
Toluene-d8 (Surr)	103		75 - 124	11/26/19 19:16	12/05/19 11:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Date Collected: 11/25/19 14:01

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Date Collected: 11/25/19 14:01

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.030	J	0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 06:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	61		31 - 166				12/06/19 14:00	12/09/19 06:08	1
Phenol-d5	66		30 - 153				12/06/19 14:00	12/09/19 06:08	1
Nitrobenzene-d5	81		37 - 147				12/06/19 14:00	12/09/19 06:08	1
2-Fluorobiphenyl	96		43 - 145				12/06/19 14:00	12/09/19 06:08	1
2,4,6-Tribromophenol	67		31 - 143				12/06/19 14:00	12/09/19 06:08	1
Terphenyl-d14	92		42 - 157				12/06/19 14:00	12/09/19 06:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	1.2	0.24	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Arsenic	7.4		0.61	0.21	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Barium	38		0.61	0.070	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Beryllium	0.66		0.24	0.057	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Boron	19		3.1	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Cadmium	0.092	J B	0.12	0.022	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Calcium	54000	B	120	21	mg/Kg	☼	12/05/19 08:52	12/06/19 22:10	10
Chromium	19	B	0.61	0.30	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Cobalt	14		0.31	0.080	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Copper	24		0.61	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Iron	20000		12	6.4	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Lead	15		0.31	0.14	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Magnesium	23000	B	6.1	3.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Manganese	330		0.61	0.089	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Nickel	37	B	0.61	0.18	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Potassium	3100		31	11	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Selenium	0.49	J	0.61	0.36	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Silver	2.0		0.31	0.079	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Sodium	180		61	9.1	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Thallium	0.80		0.61	0.31	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Vanadium	22		0.31	0.072	mg/Kg	☼	12/05/19 08:52	12/06/19 02:36	1
Zinc	54		1.2	0.54	mg/Kg	☼	12/05/19 08:52	12/06/19 22:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.63		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 02:55	1
Boron	0.084	J	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 02:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Date Collected: 11/25/19 14:01

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 02:55	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:55	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:55	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 02:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 02:55	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:55	1
Nickel	0.033		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:55	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 02:55	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 02:55	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 02:55	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.030		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 21:26	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 14:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:39	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0062	mg/Kg	☼	12/05/19 13:05	12/06/19 08:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			12/02/19 16:10	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Acetone	0.012	J	0.018	0.0077	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/26/19 19:16	12/05/19 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/26/19 19:16	12/05/19 12:07	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/26/19 19:16	12/05/19 12:07	1
Dibromofluoromethane	97		75 - 126	11/26/19 19:16	12/05/19 12:07	1
Toluene-d8 (Surr)	103		75 - 124	11/26/19 19:16	12/05/19 12:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Phenanthrene	0.12		0.041	0.0058	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 14:00	12/09/19 06:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	62		31 - 166				12/06/19 14:00	12/09/19 06:30	1
Phenol-d5	69		30 - 153				12/06/19 14:00	12/09/19 06:30	1
Nitrobenzene-d5	83		37 - 147				12/06/19 14:00	12/09/19 06:30	1
2-Fluorobiphenyl	97		43 - 145				12/06/19 14:00	12/09/19 06:30	1
2,4,6-Tribromophenol	73		31 - 143				12/06/19 14:00	12/09/19 06:30	1
Terphenyl-d14	97		42 - 157				12/06/19 14:00	12/09/19 06:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J	1.2	0.22	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Arsenic	6.6		0.58	0.20	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Barium	37		0.58	0.066	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Beryllium	0.64		0.23	0.054	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Boron	19		2.9	0.27	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Cadmium	0.092	J B	0.12	0.021	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Calcium	54000	B	120	20	mg/Kg	☼	12/05/19 08:52	12/06/19 22:19	10
Chromium	18	B	0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Copper	22		0.58	0.16	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Iron	19000		12	6.0	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Lead	13		0.29	0.13	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Magnesium	23000	B	5.8	2.9	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Manganese	360		0.58	0.084	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Nickel	35	B	0.58	0.17	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Potassium	3200		29	10	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Selenium	0.67		0.58	0.34	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Silver	1.8		0.29	0.074	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Sodium	180		58	8.5	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Thallium	0.75		0.58	0.29	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Vanadium	21		0.29	0.068	mg/Kg	☼	12/05/19 08:52	12/06/19 02:40	1
Zinc	45		1.2	0.51	mg/Kg	☼	12/05/19 08:52	12/06/19 22:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64	F1	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 03:00	1
Beryllium	<0.0040	F1	0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 03:00	1
Boron	0.089	J F1	0.50	0.050	mg/L		12/05/19 15:43	12/07/19 03:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050	F1	0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 03:00	1
Chromium	<0.025	F1	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 03:00	1
Cobalt	0.014	J F1	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 03:00	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 03:00	1
Lead	<0.0075	F1	0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 03:00	1
Manganese	1.8	F1	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 03:00	1
Nickel	0.035	F1	0.025	0.010	mg/L		12/05/19 15:43	12/07/19 03:00	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 03:00	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 03:00	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 03:00	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		12/05/19 16:13	12/06/19 21:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 14:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 21:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0065	mg/Kg	☼	12/05/19 13:05	12/06/19 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3		0.2	0.2	SU			12/02/19 16:13	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

GC/MS VOA

Analysis Batch: 518847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	8260B	518900
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	8260B	518900
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	8260B	518900
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	8260B	518900
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	8260B	518900
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	8260B	518900
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	8260B	518900
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	8260B	518900
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	8260B	518900
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	8260B	518900
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	8260B	518900
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	8260B	518900
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	8260B	518900
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	8260B	518900
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	8260B	518900
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	8260B	518900
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	8260B	518900
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	8260B	518900
MB 500-518847/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-518847/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-518847/28	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 518849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	8260B	518900
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	8260B	518900
MB 500-518849/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-518849/7	Lab Control Sample	Total/NA	Solid	8260B	

Prep Batch: 518900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	5035	
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	5035	
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	5035	
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	5035	
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	5035	
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	5035	
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	5035	
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	5035	
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	5035	
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	5035	
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	5035	
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	5035	
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	5035	
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	5035	
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	5035	
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	5035	
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	5035	
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	5035	
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	5035	
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	5035	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

GC/MS Semi VOA

Prep Batch: 519203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	3541	
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	3541	
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	3541	
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	3541	
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	3541	
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	3541	
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	3541	
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	3541	
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	3541	
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	3541	
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	3541	
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	3541	
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	3541	
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	3541	
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	3541	
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	3541	
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	3541	
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	3541	
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	3541	
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	3541	
MB 500-519203/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-519203/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-174115-1 MS	2615V2-AI-B22 (0-6)	Total/NA	Solid	3541	
500-174115-1 MSD	2615V2-AI-B22 (0-6)	Total/NA	Solid	3541	

Analysis Batch: 519390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	8270D	519203
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	8270D	519203
MB 500-519203/1-A	Method Blank	Total/NA	Solid	8270D	519203
LCS 500-519203/2-A	Lab Control Sample	Total/NA	Solid	8270D	519203
500-174115-1 MS	2615V2-AI-B22 (0-6)	Total/NA	Solid	8270D	519203
500-174115-1 MSD	2615V2-AI-B22 (0-6)	Total/NA	Solid	8270D	519203

Analysis Batch: 519402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	8270D	519203
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	8270D	519203
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	8270D	519203
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	8270D	519203
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	8270D	519203
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	8270D	519203
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	8270D	519203
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	8270D	519203
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	8270D	519203
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	8270D	519203
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	8270D	519203
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	8270D	519203
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	8270D	519203
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	8270D	519203
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	8270D	519203

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

GC/MS Semi VOA (Continued)

Analysis Batch: 519402 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	8270D	519203
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	8270D	519203
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	8270D	519203

Metals

Leach Batch: 518665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	SPLP East	Solid	1312	
500-174115-2	2615V2-AI-B22 (6-12)	SPLP East	Solid	1312	
500-174115-3	2615V2-AI-B22 (12-18)	SPLP East	Solid	1312	
500-174115-4	2615V2-AI-B22 (18-24)	SPLP East	Solid	1312	
500-174115-5	2615V2-AI-B22 (24-30)	SPLP East	Solid	1312	
500-174115-6	2615V2-AI-B21 (0-6)	SPLP East	Solid	1312	
500-174115-7	2615V2-AI-B21 (6-12)	SPLP East	Solid	1312	
500-174115-8	2615V2-AI-B21 (12-18)	SPLP East	Solid	1312	
500-174115-9	2615V2-AI-B21 (18-24)	SPLP East	Solid	1312	
500-174115-10	2615V2-AI-B21 (24-30)	SPLP East	Solid	1312	
500-174115-11	2615V2-AI-B20 (0-6)	SPLP East	Solid	1312	
500-174115-12	2615V2-AI-B20 (6-12)	SPLP East	Solid	1312	
500-174115-13	2615V2-AI-B20 (12-18)	SPLP East	Solid	1312	
500-174115-14	2615V2-AI-B20 (18-24)	SPLP East	Solid	1312	
500-174115-15	2615V2-AI-B20 (24-30)	SPLP East	Solid	1312	
500-174115-16	2615V2-AI-B19 (0-6)	SPLP East	Solid	1312	
500-174115-17	2615V2-AI-B19 (6-12)	SPLP East	Solid	1312	
500-174115-18	2615V2-AI-B19 (12-18)	SPLP East	Solid	1312	
500-174115-19	2615V2-AI-B19 (18-24)	SPLP East	Solid	1312	
500-174115-20	2615V2-AI-B19 (24-30)	SPLP East	Solid	1312	
LB 500-518665/1-B	Method Blank	SPLP East	Solid	1312	
500-174115-20 MS	2615V2-AI-B19 (24-30)	SPLP East	Solid	1312	
500-174115-20 DU	2615V2-AI-B19 (24-30)	SPLP East	Solid	1312	

Leach Batch: 518666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	1311	
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	1311	
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	1311	
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	1311	
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	1311	
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	1311	
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	1311	
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	1311	
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	1311	
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	1311	
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	1311	
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	1311	
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	1311	
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	1311	
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	1311	
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	1311	
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals (Continued)

Leach Batch: 518666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	1311	
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	1311	
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	1311	
LB 500-518666/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518666/1-C	Method Blank	TCLP	Solid	1311	
500-174115-10 MS	2615V2-AI-B21 (24-30)	TCLP	Solid	1311	
500-174115-20 MS	2615V2-AI-B19 (24-30)	TCLP	Solid	1311	
500-174115-10 DU	2615V2-AI-B21 (24-30)	TCLP	Solid	1311	
500-174115-20 DU	2615V2-AI-B19 (24-30)	TCLP	Solid	1311	

Prep Batch: 518874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	7471B	
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	7471B	
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	7471B	
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	7471B	
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	7471B	
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	7471B	
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	7471B	
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	7471B	
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	7471B	
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	7471B	
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	7471B	
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	7471B	
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	7471B	
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	7471B	
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	7471B	
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	7471B	
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	7471B	
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	7471B	
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	7471B	
MB 500-518874/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-518874/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174115-10 MS	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	
500-174115-10 MSD	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	
500-174115-10 DU	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	

Prep Batch: 518888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	3050B	
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	3050B	
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	3050B	
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	3050B	
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	3050B	
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	3050B	
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	3050B	
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	3050B	
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	3050B	
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	3050B	
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals (Continued)

Prep Batch: 518888 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	3050B	
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	3050B	
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	3050B	
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	3050B	
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	3050B	
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	3050B	
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	3050B	
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	3050B	
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	3050B	
MB 500-518888/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-518888/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-174115-1 MS	2615V2-AI-B22 (0-6)	Total/NA	Solid	3050B	
500-174115-1 MSD	2615V2-AI-B22 (0-6)	Total/NA	Solid	3050B	
500-174115-1 DU	2615V2-AI-B22 (0-6)	Total/NA	Solid	3050B	

Prep Batch: 518996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	3010A	518666
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	3010A	518666
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	3010A	518666
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	3010A	518666
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	3010A	518666
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	3010A	518666
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	3010A	518666
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	3010A	518666
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	3010A	518666
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	3010A	518666
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	3010A	518666
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	3010A	518666
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	3010A	518666
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	3010A	518666
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	3010A	518666
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	3010A	518666
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	3010A	518666
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	3010A	518666
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	3010A	518666
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	3010A	518666
LB 500-518666/1-B	Method Blank	TCLP	Solid	3010A	518666
LCS 500-518996/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174115-20 MS	2615V2-AI-B19 (24-30)	TCLP	Solid	3010A	518666
500-174115-20 DU	2615V2-AI-B19 (24-30)	TCLP	Solid	3010A	518666

Prep Batch: 519011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	SPLP East	Solid	3010A	518665
500-174115-2	2615V2-AI-B22 (6-12)	SPLP East	Solid	3010A	518665
500-174115-3	2615V2-AI-B22 (12-18)	SPLP East	Solid	3010A	518665
500-174115-4	2615V2-AI-B22 (18-24)	SPLP East	Solid	3010A	518665
500-174115-5	2615V2-AI-B22 (24-30)	SPLP East	Solid	3010A	518665
500-174115-6	2615V2-AI-B21 (0-6)	SPLP East	Solid	3010A	518665
500-174115-7	2615V2-AI-B21 (6-12)	SPLP East	Solid	3010A	518665

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals (Continued)

Prep Batch: 519011 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-8	2615V2-AI-B21 (12-18)	SPLP East	Solid	3010A	518665
500-174115-9	2615V2-AI-B21 (18-24)	SPLP East	Solid	3010A	518665
500-174115-10	2615V2-AI-B21 (24-30)	SPLP East	Solid	3010A	518665
500-174115-11	2615V2-AI-B20 (0-6)	SPLP East	Solid	3010A	518665
500-174115-12	2615V2-AI-B20 (6-12)	SPLP East	Solid	3010A	518665
500-174115-13	2615V2-AI-B20 (12-18)	SPLP East	Solid	3010A	518665
500-174115-14	2615V2-AI-B20 (18-24)	SPLP East	Solid	3010A	518665
500-174115-15	2615V2-AI-B20 (24-30)	SPLP East	Solid	3010A	518665
500-174115-16	2615V2-AI-B19 (0-6)	SPLP East	Solid	3010A	518665
500-174115-17	2615V2-AI-B19 (6-12)	SPLP East	Solid	3010A	518665
500-174115-18	2615V2-AI-B19 (12-18)	SPLP East	Solid	3010A	518665
500-174115-19	2615V2-AI-B19 (18-24)	SPLP East	Solid	3010A	518665
500-174115-20	2615V2-AI-B19 (24-30)	SPLP East	Solid	3010A	518665
LB 500-518665/1-B	Method Blank	SPLP East	Solid	3010A	518665
LCS 500-519011/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174115-20 MS	2615V2-AI-B19 (24-30)	SPLP East	Solid	3010A	518665
500-174115-20 DU	2615V2-AI-B19 (24-30)	SPLP East	Solid	3010A	518665

Analysis Batch: 519055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	6010B	518888
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	6010B	518888
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	6010B	518888
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	6010B	518888
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	6010B	518888
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	6010B	518888
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	6010B	518888
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	6010B	518888
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	6010B	518888
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	6010B	518888
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	6010B	518888
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	6010B	518888
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	6010B	518888
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	6010B	518888
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	6010B	518888
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	6010B	518888
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	6010B	518888
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	6010B	518888
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	6010B	518888
MB 500-518888/1-A	Method Blank	Total/NA	Solid	6010B	518888
LCS 500-518888/2-A	Lab Control Sample	Total/NA	Solid	6010B	518888
500-174115-1 MS	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 MSD	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 DU	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888

Prep Batch: 519136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	7470A	518666
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	7470A	518666
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	7470A	518666

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals (Continued)

Prep Batch: 519136 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	7470A	518666
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	7470A	518666
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	7470A	518666
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	7470A	518666
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	7470A	518666
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	7470A	518666
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	7470A	518666
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	7470A	518666
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	7470A	518666
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	7470A	518666
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	7470A	518666
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	7470A	518666
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	7470A	518666
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	7470A	518666
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	7470A	518666
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	7470A	518666
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	7470A	518666
LB 500-518666/1-C	Method Blank	TCLP	Solid	7470A	518666
MB 500-519136/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-519136/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174115-10 MS	2615V2-AI-B21 (24-30)	TCLP	Solid	7470A	518666
500-174115-10 DU	2615V2-AI-B21 (24-30)	TCLP	Solid	7470A	518666

Analysis Batch: 519170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	7471B	518874
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	7471B	518874
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	7471B	518874
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	7471B	518874
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	7471B	518874
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	7471B	518874
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	7471B	518874
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	7471B	518874
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	7471B	518874
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	518874
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	7471B	518874
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	7471B	518874
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	7471B	518874
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	7471B	518874
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	7471B	518874
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	7471B	518874
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	7471B	518874
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	7471B	518874
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	7471B	518874
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	7471B	518874
MB 500-518874/12-A	Method Blank	Total/NA	Solid	7471B	518874
LCS 500-518874/13-A	Lab Control Sample	Total/NA	Solid	7471B	518874
500-174115-10 MS	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	518874
500-174115-10 MSD	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	518874
500-174115-10 DU	2615V2-AI-B21 (24-30)	Total/NA	Solid	7471B	518874

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals

Analysis Batch: 519451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	SPLP East	Solid	6010B	519011
500-174115-2	2615V2-AI-B22 (6-12)	SPLP East	Solid	6010B	519011
500-174115-3	2615V2-AI-B22 (12-18)	SPLP East	Solid	6010B	519011
500-174115-4	2615V2-AI-B22 (18-24)	SPLP East	Solid	6010B	519011
500-174115-5	2615V2-AI-B22 (24-30)	SPLP East	Solid	6010B	519011
500-174115-6	2615V2-AI-B21 (0-6)	SPLP East	Solid	6010B	519011
500-174115-7	2615V2-AI-B21 (6-12)	SPLP East	Solid	6010B	519011
500-174115-8	2615V2-AI-B21 (12-18)	SPLP East	Solid	6010B	519011
500-174115-9	2615V2-AI-B21 (18-24)	SPLP East	Solid	6010B	519011
500-174115-10	2615V2-AI-B21 (24-30)	SPLP East	Solid	6010B	519011
500-174115-11	2615V2-AI-B20 (0-6)	SPLP East	Solid	6010B	519011
500-174115-12	2615V2-AI-B20 (6-12)	SPLP East	Solid	6010B	519011
500-174115-13	2615V2-AI-B20 (12-18)	SPLP East	Solid	6010B	519011
500-174115-14	2615V2-AI-B20 (18-24)	SPLP East	Solid	6010B	519011
500-174115-15	2615V2-AI-B20 (24-30)	SPLP East	Solid	6010B	519011
500-174115-16	2615V2-AI-B19 (0-6)	SPLP East	Solid	6010B	519011
500-174115-17	2615V2-AI-B19 (6-12)	SPLP East	Solid	6010B	519011
500-174115-18	2615V2-AI-B19 (12-18)	SPLP East	Solid	6010B	519011
500-174115-19	2615V2-AI-B19 (18-24)	SPLP East	Solid	6010B	519011
500-174115-20	2615V2-AI-B19 (24-30)	SPLP East	Solid	6010B	519011
LB 500-518665/1-B	Method Blank	SPLP East	Solid	6010B	519011
LCS 500-519011/2-A	Lab Control Sample	Total/NA	Solid	6010B	519011
500-174115-20 MS	2615V2-AI-B19 (24-30)	SPLP East	Solid	6010B	519011
500-174115-20 DU	2615V2-AI-B19 (24-30)	SPLP East	Solid	6010B	519011

Analysis Batch: 519452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	6010B	518888
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	6010B	518888
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	6010B	518888
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	6010B	518888
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	6010B	518888
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	6010B	518888
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	6010B	518888
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	6010B	518888
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	6010B	518888
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	6010B	518888
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	6010B	518888
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	6010B	518888
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	6010B	518888
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	6010B	518888
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	6010B	518888
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	6010B	518888
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	6010B	518888
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	6010B	518888
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	6010B	518888
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	6010B	518888
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	6010B	518888
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	6010B	518888

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals (Continued)

Analysis Batch: 519452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	6010B	518888
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	6010B	518888
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	6010B	518888
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	6010B	518888
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	6010B	518888
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	6010B	518888
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	6010B	518888
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	6010B	518888
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	6010B	518888
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	6010B	518888
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	6010B	518888
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	6010B	518888
MB 500-518888/1-A	Method Blank	Total/NA	Solid	6010B	518888
LCS 500-518888/2-A	Lab Control Sample	Total/NA	Solid	6010B	518888
500-174115-1 MS	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 MS	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 MSD	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 MSD	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 DU	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888
500-174115-1 DU	2615V2-AI-B22 (0-6)	Total/NA	Solid	6010B	518888

Analysis Batch: 519453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	6010B	518996
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	6010B	518996
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	6010B	518996
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	6010B	518996
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	6010B	518996
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	6010B	518996
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	6010B	518996
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	6010B	518996
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	6010B	518996
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	6010B	518996
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	6010B	518996
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	6010B	518996
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	6010B	518996
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	6010B	518996
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	6010B	518996
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	6010B	518996
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	6010B	518996
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	6010B	518996
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	6010B	518996
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	6010B	518996
LB 500-518666/1-B	Method Blank	TCLP	Solid	6010B	518996
LCS 500-518996/2-A	Lab Control Sample	Total/NA	Solid	6010B	518996
500-174115-20 MS	2615V2-AI-B19 (24-30)	TCLP	Solid	6010B	518996
500-174115-20 DU	2615V2-AI-B19 (24-30)	TCLP	Solid	6010B	518996

Analysis Batch: 519532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	6020A	518996

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals (Continued)

Analysis Batch: 519532 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	6020A	518996
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	6020A	518996
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	6020A	518996
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	6020A	518996
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	6020A	518996
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	6020A	518996
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	6020A	518996
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	6020A	518996
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	6020A	518996
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	6020A	518996
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	6020A	518996
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	6020A	518996
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	6020A	518996
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	6020A	518996
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	6020A	518996
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	6020A	518996
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	6020A	518996
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	6020A	518996
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	6020A	518996
LB 500-518666/1-B	Method Blank	TCLP	Solid	6020A	518996
LCS 500-518996/2-A	Lab Control Sample	Total/NA	Solid	6020A	518996
500-174115-20 MS	2615V2-AI-B19 (24-30)	TCLP	Solid	6020A	518996
500-174115-20 DU	2615V2-AI-B19 (24-30)	TCLP	Solid	6020A	518996

Analysis Batch: 519550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	7470A	519136
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	7470A	519136
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	7470A	519136
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	7470A	519136
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	7470A	519136
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	7470A	519136
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	7470A	519136
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	7470A	519136
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	7470A	519136
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	7470A	519136
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	7470A	519136
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	7470A	519136
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	7470A	519136
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	7470A	519136
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	7470A	519136
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	7470A	519136
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	7470A	519136
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	7470A	519136
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	7470A	519136
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	7470A	519136
LB 500-518666/1-C	Method Blank	TCLP	Solid	7470A	519136
MB 500-519136/12-A	Method Blank	Total/NA	Solid	7470A	519136
LCS 500-519136/13-A	Lab Control Sample	Total/NA	Solid	7470A	519136
500-174115-10 MS	2615V2-AI-B21 (24-30)	TCLP	Solid	7470A	519136
500-174115-10 DU	2615V2-AI-B21 (24-30)	TCLP	Solid	7470A	519136

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Metals

Analysis Batch: 519764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	TCLP	Solid	6020A	518996
500-174115-2	2615V2-AI-B22 (6-12)	TCLP	Solid	6020A	518996
500-174115-3	2615V2-AI-B22 (12-18)	TCLP	Solid	6020A	518996
500-174115-4	2615V2-AI-B22 (18-24)	TCLP	Solid	6020A	518996
500-174115-5	2615V2-AI-B22 (24-30)	TCLP	Solid	6020A	518996
500-174115-6	2615V2-AI-B21 (0-6)	TCLP	Solid	6020A	518996
500-174115-7	2615V2-AI-B21 (6-12)	TCLP	Solid	6020A	518996
500-174115-8	2615V2-AI-B21 (12-18)	TCLP	Solid	6020A	518996
500-174115-9	2615V2-AI-B21 (18-24)	TCLP	Solid	6020A	518996
500-174115-10	2615V2-AI-B21 (24-30)	TCLP	Solid	6020A	518996
500-174115-11	2615V2-AI-B20 (0-6)	TCLP	Solid	6020A	518996
500-174115-12	2615V2-AI-B20 (6-12)	TCLP	Solid	6020A	518996
500-174115-13	2615V2-AI-B20 (12-18)	TCLP	Solid	6020A	518996
500-174115-14	2615V2-AI-B20 (18-24)	TCLP	Solid	6020A	518996
500-174115-15	2615V2-AI-B20 (24-30)	TCLP	Solid	6020A	518996
500-174115-16	2615V2-AI-B19 (0-6)	TCLP	Solid	6020A	518996
500-174115-17	2615V2-AI-B19 (6-12)	TCLP	Solid	6020A	518996
500-174115-18	2615V2-AI-B19 (12-18)	TCLP	Solid	6020A	518996
500-174115-19	2615V2-AI-B19 (18-24)	TCLP	Solid	6020A	518996
500-174115-20	2615V2-AI-B19 (24-30)	TCLP	Solid	6020A	518996
LB 500-518666/1-B	Method Blank	TCLP	Solid	6020A	518996
LCS 500-518996/2-A	Lab Control Sample	Total/NA	Solid	6020A	518996
500-174115-20 MS	2615V2-AI-B19 (24-30)	TCLP	Solid	6020A	518996
500-174115-20 DU	2615V2-AI-B19 (24-30)	TCLP	Solid	6020A	518996

General Chemistry

Analysis Batch: 518090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	9045D	
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	9045D	
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	9045D	
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	9045D	
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	9045D	
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	9045D	
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	9045D	
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	9045D	
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	9045D	
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	9045D	
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	9045D	
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	9045D	
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	9045D	
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	9045D	
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	9045D	
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	9045D	
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	9045D	
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	9045D	
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	9045D	
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	9045D	
LCS 500-518090/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-518090/6	Lab Control Sample Dup	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

General Chemistry (Continued)

Analysis Batch: 518090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-4 DU	2615V2-AI-B22 (18-24)	Total/NA	Solid	9045D	

Analysis Batch: 518183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174115-1	2615V2-AI-B22 (0-6)	Total/NA	Solid	Moisture	
500-174115-2	2615V2-AI-B22 (6-12)	Total/NA	Solid	Moisture	
500-174115-3	2615V2-AI-B22 (12-18)	Total/NA	Solid	Moisture	
500-174115-4	2615V2-AI-B22 (18-24)	Total/NA	Solid	Moisture	
500-174115-5	2615V2-AI-B22 (24-30)	Total/NA	Solid	Moisture	
500-174115-6	2615V2-AI-B21 (0-6)	Total/NA	Solid	Moisture	
500-174115-7	2615V2-AI-B21 (6-12)	Total/NA	Solid	Moisture	
500-174115-8	2615V2-AI-B21 (12-18)	Total/NA	Solid	Moisture	
500-174115-9	2615V2-AI-B21 (18-24)	Total/NA	Solid	Moisture	
500-174115-10	2615V2-AI-B21 (24-30)	Total/NA	Solid	Moisture	
500-174115-11	2615V2-AI-B20 (0-6)	Total/NA	Solid	Moisture	
500-174115-12	2615V2-AI-B20 (6-12)	Total/NA	Solid	Moisture	
500-174115-13	2615V2-AI-B20 (12-18)	Total/NA	Solid	Moisture	
500-174115-14	2615V2-AI-B20 (18-24)	Total/NA	Solid	Moisture	
500-174115-15	2615V2-AI-B20 (24-30)	Total/NA	Solid	Moisture	
500-174115-16	2615V2-AI-B19 (0-6)	Total/NA	Solid	Moisture	
500-174115-17	2615V2-AI-B19 (6-12)	Total/NA	Solid	Moisture	
500-174115-18	2615V2-AI-B19 (12-18)	Total/NA	Solid	Moisture	
500-174115-19	2615V2-AI-B19 (18-24)	Total/NA	Solid	Moisture	
500-174115-20	2615V2-AI-B19 (24-30)	Total/NA	Solid	Moisture	
500-174115-6 DU	2615V2-AI-B21 (0-6)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174115-1	2615V2-AI-B22 (0-6)	95	107	88	96
500-174115-2	2615V2-AI-B22 (6-12)	94	105	87	97
500-174115-3	2615V2-AI-B22 (12-18)	92	102	87	96
500-174115-4	2615V2-AI-B22 (18-24)	91	104	89	98
500-174115-5	2615V2-AI-B22 (24-30)	93	102	88	97
500-174115-6	2615V2-AI-B21 (0-6)	93	126	90	102
500-174115-7	2615V2-AI-B21 (6-12)	93	102	89	98
500-174115-8	2615V2-AI-B21 (12-18)	94	102	89	96
500-174115-9	2615V2-AI-B21 (18-24)	90	101	88	97
500-174115-10	2615V2-AI-B21 (24-30)	92	100	87	97
500-174115-11	2615V2-AI-B20 (0-6)	91	107	89	97
500-174115-12	2615V2-AI-B20 (6-12)	93	101	90	96
500-174115-13	2615V2-AI-B20 (12-18)	95	100	89	95
500-174115-14	2615V2-AI-B20 (18-24)	96	101	93	94
500-174115-15	2615V2-AI-B20 (24-30)	93	101	89	97
500-174115-16	2615V2-AI-B19 (0-6)	96	111	93	96
500-174115-17	2615V2-AI-B19 (6-12)	93	102	89	96
500-174115-18	2615V2-AI-B19 (12-18)	92	102	89	94
500-174115-19	2615V2-AI-B19 (18-24)	95	104	95	103
500-174115-20	2615V2-AI-B19 (24-30)	95	106	97	103
LCS 500-518847/4	Lab Control Sample	85	96	84	96
LCS 500-518849/7	Lab Control Sample	86	94	95	100
LCS 500-518847/28	Lab Control Sample Dup	84	96	85	96
MB 500-518847/7	Method Blank	89	100	84	94
MB 500-518849/6	Method Blank	91	99	95	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174115-1	2615V2-AI-B22 (0-6)	95	100	89	92	76	100
500-174115-1 MS	2615V2-AI-B22 (0-6)	87	92	81	86	79	94
500-174115-1 MSD	2615V2-AI-B22 (0-6)	86	92	81	84	71	88
500-174115-2	2615V2-AI-B22 (6-12)	84	87	80	82	51	88
500-174115-3	2615V2-AI-B22 (12-18)	58	68	82	92	52	91
500-174115-4	2615V2-AI-B22 (18-24)	65	75	90	100	65	101
500-174115-5	2615V2-AI-B22 (24-30)	59	69	80	91	55	98
500-174115-6	2615V2-AI-B21 (0-6)	66	76	88	98	79	104
500-174115-7	2615V2-AI-B21 (6-12)	60	71	82	94	53	99
500-174115-8	2615V2-AI-B21 (12-18)	67	80	87	105	71	119
500-174115-9	2615V2-AI-B21 (18-24)	53	22 X	47	65	54	94
500-174115-10	2615V2-AI-B21 (24-30)	59	71	78	91	70	106

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174115-11	2615V2-AI-B20 (0-6)	59	70	77	95	68	101
500-174115-12	2615V2-AI-B20 (6-12)	60	69	77	93	60	103
500-174115-13	2615V2-AI-B20 (12-18)	60	72	83	104	67	109
500-174115-14	2615V2-AI-B20 (18-24)	51	64	68	90	64	100
500-174115-15	2615V2-AI-B20 (24-30)	62	74	80	100	78	103
500-174115-16	2615V2-AI-B19 (0-6)	54	68	68	87	89	97
500-174115-17	2615V2-AI-B19 (6-12)	58	68	75	89	75	91
500-174115-18	2615V2-AI-B19 (12-18)	67	76	82	100	79	103
500-174115-19	2615V2-AI-B19 (18-24)	61	66	81	96	67	92
500-174115-20	2615V2-AI-B19 (24-30)	62	69	83	97	73	97
LCS 500-519203/2-A	Lab Control Sample	99	108	100	97	95	100
MB 500-519203/1-A	Method Blank	98	100	100	98	64	103

Surrogate Legend

- 2FP = 2-Fluorophenol
- PHL = Phenol-d5
- NBZ = Nitrobenzene-d5
- FBP = 2-Fluorobiphenyl
- TBP = 2,4,6-Tribromophenol
- TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518847/7
Matrix: Solid
Analysis Batch: 518847

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/05/19 11:12	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/05/19 11:12	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/05/19 11:12	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/05/19 11:12	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/05/19 11:12	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/05/19 11:12	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/05/19 11:12	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/05/19 11:12	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/05/19 11:12	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/05/19 11:12	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/05/19 11:12	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/05/19 11:12	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/05/19 11:12	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/05/19 11:12	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/05/19 11:12	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/05/19 11:12	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/05/19 11:12	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/05/19 11:12	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/05/19 11:12	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/05/19 11:12	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/05/19 11:12	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/05/19 11:12	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/05/19 11:12	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/05/19 11:12	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/05/19 11:12	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/05/19 11:12	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/05/19 11:12	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/05/19 11:12	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/05/19 11:12	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/05/19 11:12	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/05/19 11:12	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/05/19 11:12	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/05/19 11:12	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/05/19 11:12	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/05/19 11:12	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/05/19 11:12	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/05/19 11:12	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	89		70 - 134		12/05/19 11:12	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/05/19 11:12	1
Dibromofluoromethane	84		75 - 126		12/05/19 11:12	1
Toluene-d8 (Surr)	94		75 - 124		12/05/19 11:12	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518847/4

Matrix: Solid

Analysis Batch: 518847

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0422		mg/Kg		84	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0415		mg/Kg		83	70 - 122
1,1,2-Trichloroethane	0.0500	0.0431		mg/Kg		86	70 - 125
1,1-Dichloroethane	0.0500	0.0417		mg/Kg		83	70 - 125
1,1-Dichloroethene	0.0500	0.0439		mg/Kg		88	70 - 120
1,2-Dichloroethane	0.0500	0.0416		mg/Kg		83	70 - 130
1,2-Dichloropropane	0.0500	0.0427		mg/Kg		85	70 - 125
2-Butanone (MEK)	0.0500	0.0427		mg/Kg		85	47 - 138
2-Hexanone	0.0500	0.0402		mg/Kg		80	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0382		mg/Kg		76	50 - 148
Acetone	0.0500	0.0476		mg/Kg		95	40 - 150
Benzene	0.0500	0.0435		mg/Kg		87	70 - 125
Bromodichloromethane	0.0500	0.0405		mg/Kg		81	67 - 129
Bromoform	0.0500	0.0361		mg/Kg		72	68 - 136
Bromomethane	0.0500	0.0452		mg/Kg		90	70 - 130
Carbon disulfide	0.0500	0.0421		mg/Kg		84	70 - 129
Carbon tetrachloride	0.0500	0.0415		mg/Kg		83	75 - 125
Chlorobenzene	0.0500	0.0452		mg/Kg		90	50 - 150
Chloroethane	0.0500	0.0423		mg/Kg		85	75 - 125
Chloroform	0.0500	0.0409		mg/Kg		82	57 - 135
Chloromethane	0.0500	0.0431		mg/Kg		86	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0411		mg/Kg		82	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0426		mg/Kg		85	70 - 125
Dibromochloromethane	0.0500	0.0387		mg/Kg		77	69 - 125
Ethylbenzene	0.0500	0.0436		mg/Kg		87	61 - 136
Methyl tert-butyl ether	0.0500	0.0405		mg/Kg		81	50 - 140
Methylene Chloride	0.0500	0.0411		mg/Kg		82	70 - 126
Styrene	0.0500	0.0426		mg/Kg		85	70 - 125
Tetrachloroethene	0.0500	0.0445		mg/Kg		89	70 - 124
Toluene	0.0500	0.0447		mg/Kg		89	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0424		mg/Kg		85	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0424		mg/Kg		85	70 - 125
Trichloroethene	0.0500	0.0440		mg/Kg		88	70 - 125
Vinyl acetate	0.0500	0.0307		mg/Kg		61	40 - 153
Vinyl chloride	0.0500	0.0453		mg/Kg		91	70 - 125
Xylenes, Total	0.100	0.0880		mg/Kg		88	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	84		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-518847/28

Matrix: Solid

Analysis Batch: 518847

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0440		mg/Kg		88	70 - 128	4	30
1,1,2,2-Tetrachloroethane	0.0500	0.0431		mg/Kg		86	70 - 122	4	30
1,1,2-Trichloroethane	0.0500	0.0451		mg/Kg		90	70 - 125	5	30
1,1-Dichloroethane	0.0500	0.0442		mg/Kg		88	70 - 125	6	30
1,1-Dichloroethene	0.0500	0.0470		mg/Kg		94	70 - 120	7	30
1,2-Dichloroethane	0.0500	0.0433		mg/Kg		87	70 - 130	4	30
1,2-Dichloropropane	0.0500	0.0453		mg/Kg		91	70 - 125	6	30
2-Butanone (MEK)	0.0500	0.0400		mg/Kg		80	47 - 138	7	30
2-Hexanone	0.0500	0.0385		mg/Kg		77	48 - 146	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0366		mg/Kg		73	50 - 148	4	30
Acetone	0.0500	0.0453		mg/Kg		91	40 - 150	5	30
Benzene	0.0500	0.0462		mg/Kg		92	70 - 125	6	30
Bromodichloromethane	0.0500	0.0426		mg/Kg		85	67 - 129	5	30
Bromoform	0.0500	0.0379		mg/Kg		76	68 - 136	5	30
Bromomethane	0.0500	0.0472		mg/Kg		94	70 - 130	4	30
Carbon disulfide	0.0500	0.0448		mg/Kg		90	70 - 129	6	30
Carbon tetrachloride	0.0500	0.0449		mg/Kg		90	75 - 125	8	30
Chlorobenzene	0.0500	0.0486		mg/Kg		97	50 - 150	7	30
Chloroethane	0.0500	0.0467		mg/Kg		93	75 - 125	10	30
Chloroform	0.0500	0.0425		mg/Kg		85	57 - 135	4	30
Chloromethane	0.0500	0.0452		mg/Kg		90	70 - 125	5	30
cis-1,2-Dichloroethene	0.0500	0.0443		mg/Kg		89	70 - 125	7	30
cis-1,3-Dichloropropene	0.0500	0.0456		mg/Kg		91	70 - 125	7	30
Dibromochloromethane	0.0500	0.0410		mg/Kg		82	69 - 125	6	30
Ethylbenzene	0.0500	0.0476		mg/Kg		95	61 - 136	9	30
Methyl tert-butyl ether	0.0500	0.0428		mg/Kg		86	50 - 140	6	30
Methylene Chloride	0.0500	0.0358		mg/Kg		72	70 - 126	14	30
Styrene	0.0500	0.0461		mg/Kg		92	70 - 125	8	30
Tetrachloroethene	0.0500	0.0485		mg/Kg		97	70 - 124	9	30
Toluene	0.0500	0.0483		mg/Kg		97	70 - 125	8	30
trans-1,2-Dichloroethene	0.0500	0.0440		mg/Kg		88	70 - 125	4	30
trans-1,3-Dichloropropene	0.0500	0.0449		mg/Kg		90	70 - 125	6	30
Trichloroethene	0.0500	0.0472		mg/Kg		94	70 - 125	7	30
Vinyl acetate	0.0500	0.0299		mg/Kg		60	40 - 153	3	30
Vinyl chloride	0.0500	0.0478		mg/Kg		96	70 - 125	5	30
Xylenes, Total	0.100	0.0948		mg/Kg		95	53 - 147	7	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	84		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	85		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518849/6
Matrix: Solid
Analysis Batch: 518849

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/05/19 10:51	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/05/19 10:51	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/05/19 10:51	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/05/19 10:51	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/05/19 10:51	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/05/19 10:51	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/05/19 10:51	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/05/19 10:51	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/05/19 10:51	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/05/19 10:51	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/05/19 10:51	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/05/19 10:51	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/05/19 10:51	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/05/19 10:51	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/05/19 10:51	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/05/19 10:51	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/05/19 10:51	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/05/19 10:51	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/05/19 10:51	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/05/19 10:51	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/05/19 10:51	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/05/19 10:51	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/05/19 10:51	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/05/19 10:51	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/05/19 10:51	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/05/19 10:51	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/05/19 10:51	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/05/19 10:51	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/05/19 10:51	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/05/19 10:51	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/05/19 10:51	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/05/19 10:51	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/05/19 10:51	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/05/19 10:51	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/05/19 10:51	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/05/19 10:51	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/05/19 10:51	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	91		70 - 134		12/05/19 10:51	1
4-Bromofluorobenzene (Surr)	99		75 - 131		12/05/19 10:51	1
Dibromofluoromethane	95		75 - 126		12/05/19 10:51	1
Toluene-d8 (Surr)	99		75 - 124		12/05/19 10:51	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518849/7

Matrix: Solid

Analysis Batch: 518849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0449		mg/Kg		90	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0377		mg/Kg		75	70 - 122
1,1,2-Trichloroethane	0.0500	0.0409		mg/Kg		82	70 - 125
1,1-Dichloroethane	0.0500	0.0403		mg/Kg		81	70 - 125
1,1-Dichloroethene	0.0500	0.0421		mg/Kg		84	70 - 120
1,2-Dichloroethane	0.0500	0.0412		mg/Kg		82	70 - 130
1,2-Dichloropropane	0.0500	0.0393		mg/Kg		79	70 - 125
2-Butanone (MEK)	0.0500	0.0372		mg/Kg		74	47 - 138
2-Hexanone	0.0500	0.0358		mg/Kg		72	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0362		mg/Kg		72	50 - 148
Acetone	0.0500	0.0388		mg/Kg		78	40 - 150
Benzene	0.0500	0.0427		mg/Kg		85	70 - 125
Bromodichloromethane	0.0500	0.0434		mg/Kg		87	67 - 129
Bromoform	0.0500	0.0428		mg/Kg		86	68 - 136
Bromomethane	0.0500	0.0523		mg/Kg		105	70 - 130
Carbon disulfide	0.0500	0.0403		mg/Kg		81	70 - 129
Carbon tetrachloride	0.0500	0.0447		mg/Kg		89	75 - 125
Chlorobenzene	0.0500	0.0445		mg/Kg		89	50 - 150
Chloroethane	0.0500	0.0470		mg/Kg		94	75 - 125
Chloroform	0.0500	0.0425		mg/Kg		85	57 - 135
Chloromethane	0.0500	0.0462		mg/Kg		92	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0432		mg/Kg		86	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0406		mg/Kg		81	70 - 125
Dibromochloromethane	0.0500	0.0430		mg/Kg		86	69 - 125
Ethylbenzene	0.0500	0.0437		mg/Kg		87	61 - 136
Methyl tert-butyl ether	0.0500	0.0392		mg/Kg		78	50 - 140
Methylene Chloride	0.0500	0.0404		mg/Kg		81	70 - 126
Styrene	0.0500	0.0433		mg/Kg		87	70 - 125
Tetrachloroethene	0.0500	0.0473		mg/Kg		95	70 - 124
Toluene	0.0500	0.0435		mg/Kg		87	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0433		mg/Kg		87	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0393		mg/Kg		79	70 - 125
Trichloroethene	0.0500	0.0478		mg/Kg		96	70 - 125
Vinyl acetate	0.0500	0.0326		mg/Kg		65	40 - 153
Vinyl chloride	0.0500	0.0450		mg/Kg		90	70 - 125
Xylenes, Total	0.100	0.0881		mg/Kg		88	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	95		75 - 126
Toluene-d8 (Surr)	100		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-519203/1-A
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519203

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/06/19 14:00	12/08/19 21:52	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519203/1-A
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519203

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/06/19 14:00	12/08/19 21:52	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/06/19 14:00	12/08/19 21:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	98		31 - 166	12/06/19 14:00	12/08/19 21:52	1
Phenol-d5	100		30 - 153	12/06/19 14:00	12/08/19 21:52	1
Nitrobenzene-d5	100		37 - 147	12/06/19 14:00	12/08/19 21:52	1
2-Fluorobiphenyl	98		43 - 145	12/06/19 14:00	12/08/19 21:52	1
2,4,6-Tribromophenol	64		31 - 143	12/06/19 14:00	12/08/19 21:52	1
Terphenyl-d14	103		42 - 157	12/06/19 14:00	12/08/19 21:52	1

Lab Sample ID: LCS 500-519203/2-A
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-chloroethyl)ether	1.33	1.36		mg/Kg		102	55 - 111
1,3-Dichlorobenzene	1.33	1.30		mg/Kg		98	65 - 124
1,4-Dichlorobenzene	1.33	1.33		mg/Kg		100	61 - 110
1,2-Dichlorobenzene	1.33	1.31		mg/Kg		98	62 - 110
2-Methylphenol	1.33	1.43		mg/Kg		107	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.40		mg/Kg		105	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.40		mg/Kg		105	56 - 118
Hexachloroethane	1.33	1.29		mg/Kg		97	60 - 114
2-Chlorophenol	1.33	1.38		mg/Kg		104	64 - 110
Nitrobenzene	1.33	1.35		mg/Kg		101	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.45		mg/Kg		108	60 - 112
1,2,4-Trichlorobenzene	1.33	1.38		mg/Kg		103	66 - 117
Isophorone	1.33	1.39		mg/Kg		104	55 - 110
2,4-Dimethylphenol	1.33	1.43		mg/Kg		107	60 - 110
Hexachlorobutadiene	1.33	1.40		mg/Kg		105	56 - 120
Naphthalene	1.33	1.38		mg/Kg		103	63 - 110
2,4-Dichlorophenol	1.33	1.35		mg/Kg		102	58 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519203/2-A
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.28		mg/Kg		96	30 - 150
2,4,6-Trichlorophenol	1.33	1.28		mg/Kg		96	57 - 120
2,4,5-Trichlorophenol	1.33	1.31		mg/Kg		98	50 - 120
Hexachlorocyclopentadiene	1.33	0.933		mg/Kg		70	10 - 133
2-Methylnaphthalene	1.33	1.39		mg/Kg		104	69 - 112
2-Nitroaniline	1.33	1.35		mg/Kg		101	57 - 124
2-Chloronaphthalene	1.33	1.36		mg/Kg		102	69 - 114
4-Chloro-3-methylphenol	1.33	1.38		mg/Kg		103	65 - 122
2,6-Dinitrotoluene	1.33	1.39		mg/Kg		104	70 - 123
2-Nitrophenol	1.33	1.39		mg/Kg		105	60 - 120
3-Nitroaniline	1.33	1.10		mg/Kg		82	40 - 122
Dimethyl phthalate	1.33	1.35		mg/Kg		102	69 - 116
2,4-Dinitrophenol	2.67	0.639	J	mg/Kg		24	10 - 100
Acenaphthylene	1.33	1.36		mg/Kg		102	68 - 120
2,4-Dinitrotoluene	1.33	1.40		mg/Kg		105	69 - 124
Acenaphthene	1.33	1.36		mg/Kg		102	65 - 124
Dibenzofuran	1.33	1.36		mg/Kg		102	66 - 115
4-Nitrophenol	2.67	2.44		mg/Kg		92	30 - 122
Fluorene	1.33	1.39		mg/Kg		104	62 - 120
4-Nitroaniline	1.33	1.30		mg/Kg		98	60 - 160
4-Bromophenyl phenyl ether	1.33	1.41		mg/Kg		106	68 - 118
Hexachlorobenzene	1.33	1.40		mg/Kg		105	63 - 124
Diethyl phthalate	1.33	1.36		mg/Kg		102	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.35		mg/Kg		102	62 - 119
Pentachlorophenol	2.67	1.36		mg/Kg		51	13 - 112
N-Nitrosodiphenylamine	1.33	1.40		mg/Kg		105	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.917		mg/Kg		34	10 - 110
Phenanthrene	1.33	1.39		mg/Kg		104	62 - 120
Anthracene	1.33	1.40		mg/Kg		105	70 - 114
Carbazole	1.33	1.43		mg/Kg		107	65 - 142
Di-n-butyl phthalate	1.33	1.41		mg/Kg		106	65 - 120
Fluoranthene	1.33	1.40		mg/Kg		105	62 - 120
Pyrene	1.33	1.44		mg/Kg		108	61 - 128
Butyl benzyl phthalate	1.33	1.38		mg/Kg		103	71 - 129
Benzo[a]anthracene	1.33	1.30		mg/Kg		97	67 - 122
Chrysene	1.33	1.32		mg/Kg		99	63 - 120
3,3'-Dichlorobenzidine	1.33	1.06		mg/Kg		80	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.42		mg/Kg		106	72 - 131
Di-n-octyl phthalate	1.33	1.37		mg/Kg		102	68 - 134
Benzo[b]fluoranthene	1.33	1.41		mg/Kg		106	69 - 129
Benzo[k]fluoranthene	1.33	1.35		mg/Kg		101	68 - 127
Benzo[a]pyrene	1.33	1.33		mg/Kg		100	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.35		mg/Kg		102	68 - 130
Dibenz(a,h)anthracene	1.33	1.36		mg/Kg		102	64 - 131
Benzo[g,h,i]perylene	1.33	1.43		mg/Kg		107	72 - 131
3 & 4 Methylphenol	1.33	1.33		mg/Kg		100	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519203/2-A
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519203

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	99		31 - 166
Phenol-d5	108		30 - 153
Nitrobenzene-d5	100		37 - 147
2-Fluorobiphenyl	97		43 - 145
2,4,6-Tribromophenol	95		31 - 143
Terphenyl-d14	100		42 - 157

Lab Sample ID: 500-174115-1 MS
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 519203

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.19		1.56	1.63		mg/Kg	☼	105	56 - 122
Bis(2-chloroethyl)ether	<0.19		1.56	1.38		mg/Kg	☼	88	55 - 111
1,3-Dichlorobenzene	<0.19		1.56	1.20		mg/Kg	☼	77	60 - 110
1,4-Dichlorobenzene	<0.19		1.56	1.22		mg/Kg	☼	78	61 - 110
1,2-Dichlorobenzene	<0.19		1.56	1.23		mg/Kg	☼	79	62 - 110
2-Methylphenol	<0.19		1.56	1.56		mg/Kg	☼	100	60 - 120
2,2'-oxybis[1-chloropropane]	<0.19		1.56	1.37		mg/Kg	☼	88	40 - 124
N-Nitrosodi-n-propylamine	<0.078		1.56	1.55		mg/Kg	☼	99	56 - 118
Hexachloroethane	<0.19	F1	1.56	0.671	F1	mg/Kg	☼	43	60 - 114
2-Chlorophenol	<0.19		1.56	1.47		mg/Kg	☼	94	64 - 110
Nitrobenzene	<0.038		1.56	1.34		mg/Kg	☼	86	60 - 116
Bis(2-chloroethoxy)methane	<0.19		1.56	1.48		mg/Kg	☼	95	60 - 112
1,2,4-Trichlorobenzene	<0.19		1.56	1.34		mg/Kg	☼	86	66 - 117
Isophorone	<0.19		1.56	1.45		mg/Kg	☼	93	55 - 110
2,4-Dimethylphenol	<0.38		1.56	1.59		mg/Kg	☼	102	60 - 110
Hexachlorobutadiene	<0.19		1.56	1.31		mg/Kg	☼	84	56 - 120
Naphthalene	<0.038		1.56	1.39		mg/Kg	☼	89	63 - 110
2,4-Dichlorophenol	<0.38		1.56	1.54		mg/Kg	☼	99	58 - 120
4-Chloroaniline	<0.78		1.56	1.21		mg/Kg	☼	78	30 - 150
2,4,6-Trichlorophenol	<0.38		1.56	1.56		mg/Kg	☼	100	57 - 120
2,4,5-Trichlorophenol	<0.38		1.56	1.45		mg/Kg	☼	93	50 - 120
Hexachlorocyclopentadiene	<0.78	F1	1.56	<0.79	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.073	J	1.56	1.57		mg/Kg	☼	96	69 - 112
2-Nitroaniline	<0.19		1.56	1.62		mg/Kg	☼	103	57 - 124
2-Chloronaphthalene	<0.19		1.56	1.56		mg/Kg	☼	100	69 - 114
4-Chloro-3-methylphenol	<0.38		1.56	1.61		mg/Kg	☼	103	65 - 122
2,6-Dinitrotoluene	<0.19		1.56	1.64		mg/Kg	☼	105	70 - 123
2-Nitrophenol	<0.38		1.56	1.39		mg/Kg	☼	89	60 - 120
3-Nitroaniline	<0.38		1.56	1.44		mg/Kg	☼	92	40 - 122
Dimethyl phthalate	<0.19		1.56	1.61		mg/Kg	☼	103	69 - 116
2,4-Dinitrophenol	<0.78	F1	3.13	<0.79	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.038		1.56	1.56		mg/Kg	☼	100	68 - 120
2,4-Dinitrotoluene	<0.19		1.56	1.57		mg/Kg	☼	100	69 - 124
Acenaphthene	<0.038		1.56	1.60		mg/Kg	☼	102	65 - 124
Dibenzofuran	<0.19		1.56	1.63		mg/Kg	☼	104	66 - 115
4-Nitrophenol	<0.78		3.13	2.87		mg/Kg	☼	92	30 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174115-1 MS
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 519203

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	<0.038		1.56	1.67		mg/Kg	☼	107	62 - 120
4-Nitroaniline	<0.38		1.56	1.59		mg/Kg	☼	102	60 - 160
4-Bromophenyl phenyl ether	<0.19		1.56	1.66		mg/Kg	☼	106	68 - 118
Hexachlorobenzene	<0.078		1.56	1.62		mg/Kg	☼	103	63 - 124
Diethyl phthalate	<0.19		1.56	1.63		mg/Kg	☼	104	58 - 120
4-Chlorophenyl phenyl ether	<0.19		1.56	1.63		mg/Kg	☼	104	62 - 119
Pentachlorophenol	<0.78	F2	3.13	1.72		mg/Kg	☼	55	13 - 112
N-Nitrosodiphenylamine	<0.19	F1	1.56	1.81	F1	mg/Kg	☼	116	65 - 112
4,6-Dinitro-2-methylphenol	<0.78	F1	3.13	0.385	J	mg/Kg	☼	12	10 - 110
Phenanthrene	0.12		1.56	1.76		mg/Kg	☼	105	62 - 120
Anthracene	<0.038		1.56	1.70		mg/Kg	☼	109	70 - 114
Carbazole	<0.19		1.56	1.71		mg/Kg	☼	110	65 - 142
Di-n-butyl phthalate	<0.19		1.56	1.66		mg/Kg	☼	106	65 - 120
Fluoranthene	0.0072	J	1.56	1.63		mg/Kg	☼	104	62 - 120
Pyrene	0.019	J	1.56	1.68		mg/Kg	☼	106	61 - 128
Butyl benzyl phthalate	<0.19		1.56	1.60		mg/Kg	☼	102	71 - 129
Benzo[a]anthracene	<0.038		1.56	1.53		mg/Kg	☼	98	67 - 122
Chrysene	0.033	J	1.56	1.57		mg/Kg	☼	98	63 - 120
3,3'-Dichlorobenzidine	<0.19		1.56	1.09		mg/Kg	☼	70	35 - 128
Bis(2-ethylhexyl) phthalate	<0.19		1.56	1.66		mg/Kg	☼	106	72 - 131
Di-n-octyl phthalate	<0.19		1.56	1.64		mg/Kg	☼	105	68 - 134
Benzo[b]fluoranthene	<0.038		1.56	1.75		mg/Kg	☼	112	69 - 129
Benzo[k]fluoranthene	<0.038		1.56	1.67		mg/Kg	☼	107	68 - 127
Benzo[a]pyrene	<0.038		1.56	1.56		mg/Kg	☼	100	65 - 133
Indeno[1,2,3-cd]pyrene	<0.038		1.56	1.21		mg/Kg	☼	78	68 - 130
Dibenz(a,h)anthracene	<0.038		1.56	1.26		mg/Kg	☼	81	64 - 131
Benzo[g,h,i]perylene	<0.038	F1	1.56	1.18		mg/Kg	☼	76	72 - 131
3 & 4 Methylphenol	<0.19		1.56	1.49		mg/Kg	☼	96	57 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	87		31 - 166
Phenol-d5	92		30 - 153
Nitrobenzene-d5	81		37 - 147
2-Fluorobiphenyl	86		43 - 145
2,4,6-Tribromophenol	79		31 - 143
Terphenyl-d14	94		42 - 157

Lab Sample ID: 500-174115-1 MSD
Matrix: Solid
Analysis Batch: 519390

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 519203

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenol	<0.19		1.56	1.45		mg/Kg	☼	93	56 - 122	12	30
Bis(2-chloroethyl)ether	<0.19		1.56	1.43		mg/Kg	☼	92	55 - 111	3	30
1,3-Dichlorobenzene	<0.19		1.56	1.19		mg/Kg	☼	77	60 - 110	1	30
1,4-Dichlorobenzene	<0.19		1.56	1.27		mg/Kg	☼	82	61 - 110	5	30
1,2-Dichlorobenzene	<0.19		1.56	1.23		mg/Kg	☼	79	62 - 110	1	30
2-Methylphenol	<0.19		1.56	1.42		mg/Kg	☼	91	60 - 120	9	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174115-1 MSD

Matrix: Solid

Analysis Batch: 519390

Client Sample ID: 2615V2-AI-B22 (0-6)

Prep Type: Total/NA

Prep Batch: 519203

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
2,2'-oxybis[1-chloropropane]	<0.19		1.56	1.31		mg/Kg	☼	84	40 - 124	5	30
N-Nitrosodi-n-propylamine	<0.078		1.56	1.39		mg/Kg	☼	89	56 - 118	11	30
Hexachloroethane	<0.19	F1	1.56	0.609	F1	mg/Kg	☼	39	60 - 114	10	30
2-Chlorophenol	<0.19		1.56	1.36		mg/Kg	☼	87	64 - 110	7	30
Nitrobenzene	<0.038		1.56	1.25		mg/Kg	☼	80	60 - 116	7	30
Bis(2-chloroethoxy)methane	<0.19		1.56	1.37		mg/Kg	☼	88	60 - 112	8	30
1,2,4-Trichlorobenzene	<0.19		1.56	1.28		mg/Kg	☼	82	66 - 117	5	30
Isophorone	<0.19		1.56	1.35		mg/Kg	☼	87	55 - 110	7	30
2,4-Dimethylphenol	<0.38		1.56	1.40		mg/Kg	☼	90	60 - 110	13	30
Hexachlorobutadiene	<0.19		1.56	1.25		mg/Kg	☼	81	56 - 120	5	30
Naphthalene	<0.038		1.56	1.30		mg/Kg	☼	83	63 - 110	7	30
2,4-Dichlorophenol	<0.38		1.56	1.31		mg/Kg	☼	84	58 - 120	17	30
4-Chloroaniline	<0.78		1.56	1.12		mg/Kg	☼	72	30 - 150	8	30
2,4,6-Trichlorophenol	<0.38		1.56	1.34		mg/Kg	☼	86	57 - 120	15	30
2,4,5-Trichlorophenol	<0.38		1.56	1.27		mg/Kg	☼	82	50 - 120	13	30
Hexachlorocyclopentadiene	<0.78	F1	1.56	<0.78	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.073	J	1.56	1.44		mg/Kg	☼	88	69 - 112	9	30
2-Nitroaniline	<0.19		1.56	1.44		mg/Kg	☼	93	57 - 124	11	30
2-Chloronaphthalene	<0.19		1.56	1.43		mg/Kg	☼	92	69 - 114	9	30
4-Chloro-3-methylphenol	<0.38		1.56	1.46		mg/Kg	☼	94	65 - 122	10	30
2,6-Dinitrotoluene	<0.19		1.56	1.51		mg/Kg	☼	97	70 - 123	8	30
2-Nitrophenol	<0.38		1.56	1.30		mg/Kg	☼	84	60 - 120	7	30
3-Nitroaniline	<0.38		1.56	1.48		mg/Kg	☼	95	40 - 122	3	30
Dimethyl phthalate	<0.19		1.56	1.47		mg/Kg	☼	94	69 - 116	9	30
2,4-Dinitrophenol	<0.78	F1	3.11	<0.78	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.038		1.56	1.45		mg/Kg	☼	93	68 - 120	7	30
2,4-Dinitrotoluene	<0.19		1.56	1.39		mg/Kg	☼	89	69 - 124	12	30
Acenaphthene	<0.038		1.56	1.47		mg/Kg	☼	94	65 - 124	9	30
Dibenzofuran	<0.19		1.56	1.48		mg/Kg	☼	95	66 - 115	10	30
4-Nitrophenol	<0.78		3.11	2.13		mg/Kg	☼	69	30 - 122	30	30
Fluorene	<0.038		1.56	1.51		mg/Kg	☼	97	62 - 120	10	30
4-Nitroaniline	<0.38		1.56	1.46		mg/Kg	☼	94	60 - 160	8	30
4-Bromophenyl phenyl ether	<0.19		1.56	1.50		mg/Kg	☼	96	68 - 118	10	30
Hexachlorobenzene	<0.078		1.56	1.46		mg/Kg	☼	94	63 - 124	10	30
Diethyl phthalate	<0.19		1.56	1.51		mg/Kg	☼	97	58 - 120	8	30
4-Chlorophenyl phenyl ether	<0.19		1.56	1.47		mg/Kg	☼	95	62 - 119	10	30
Pentachlorophenol	<0.78	F2	3.11	1.25	F2	mg/Kg	☼	40	13 - 112	32	30
N-Nitrosodiphenylamine	<0.19	F1	1.56	1.65		mg/Kg	☼	106	65 - 112	10	30
4,6-Dinitro-2-methylphenol	<0.78	F1	3.11	<0.78	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.12		1.56	1.58		mg/Kg	☼	93	62 - 120	11	30
Anthracene	<0.038		1.56	1.47		mg/Kg	☼	94	70 - 114	15	30
Carbazole	<0.19		1.56	1.52		mg/Kg	☼	98	65 - 142	12	30
Di-n-butyl phthalate	<0.19		1.56	1.48		mg/Kg	☼	95	65 - 120	12	30
Fluoranthene	0.0072	J	1.56	1.46		mg/Kg	☼	93	62 - 120	11	30
Pyrene	0.019	J	1.56	1.52		mg/Kg	☼	96	61 - 128	10	30
Butyl benzyl phthalate	<0.19		1.56	1.46		mg/Kg	☼	94	71 - 129	9	30
Benzo[a]anthracene	<0.038		1.56	1.40		mg/Kg	☼	90	67 - 122	9	30
Chrysene	0.033	J	1.56	1.40		mg/Kg	☼	88	63 - 120	12	30
3,3'-Dichlorobenzidine	<0.19		1.56	0.983		mg/Kg	☼	63	35 - 128	10	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174115-1 MSD

Matrix: Solid

Analysis Batch: 519390

Client Sample ID: 2615V2-AI-B22 (0-6)

Prep Type: Total/NA

Prep Batch: 519203

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bis(2-ethylhexyl) phthalate	<0.19		1.56	1.50		mg/Kg	☼	97	72 - 131	10	30
Di-n-octyl phthalate	<0.19		1.56	1.47		mg/Kg	☼	94	68 - 134	11	30
Benzo[b]fluoranthene	<0.038		1.56	1.54		mg/Kg	☼	99	69 - 129	12	30
Benzo[k]fluoranthene	<0.038		1.56	1.55		mg/Kg	☼	100	68 - 127	8	30
Benzo[a]pyrene	<0.038		1.56	1.39		mg/Kg	☼	89	65 - 133	11	30
Indeno[1,2,3-cd]pyrene	<0.038		1.56	1.09		mg/Kg	☼	70	68 - 130	11	30
Dibenz(a,h)anthracene	<0.038		1.56	1.13		mg/Kg	☼	73	64 - 131	11	30
Benzo[g,h,i]perylene	<0.038	F1	1.56	1.05	F1	mg/Kg	☼	68	72 - 131	11	30
3 & 4 Methylphenol	<0.19		1.56	1.42		mg/Kg	☼	91	57 - 120	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	86		31 - 166
Phenol-d5	92		30 - 153
Nitrobenzene-d5	81		37 - 147
2-Fluorobiphenyl	84		43 - 145
2,4,6-Tribromophenol	71		31 - 143
Terphenyl-d14	88		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-518888/1-A

Matrix: Solid

Analysis Batch: 519055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 518888

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Barium	<1.0		1.0	0.11	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Boron	<5.0		5.0	0.47	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Cadmium	0.0425	J	0.20	0.036	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Calcium	5.90	J	20	3.4	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Chromium	0.780	J	1.0	0.50	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Copper	<1.0		1.0	0.28	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Iron	<20		20	10	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Lead	<0.50		0.50	0.23	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Magnesium	5.81	J	10	5.0	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Nickel	0.561	J	1.0	0.29	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Potassium	<50		50	18	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Silver	<0.50		0.50	0.13	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Sodium	<100		100	15	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/05/19 08:52	12/06/19 00:39	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/05/19 08:52	12/06/19 00:39	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-518888/1-A
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<2.0		2.0	0.88	mg/Kg		12/05/19 08:52	12/06/19 18:15	1

Lab Sample ID: LCS 500-518888/2-A
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518888
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	45.3		mg/Kg		91	80 - 120
Arsenic	10.0	8.85		mg/Kg		89	80 - 120
Barium	200	185		mg/Kg		93	80 - 120
Beryllium	5.00	4.54		mg/Kg		91	80 - 120
Boron	100	84.0		mg/Kg		84	80 - 120
Cadmium	5.00	4.43		mg/Kg		89	80 - 120
Calcium	1000	977		mg/Kg		98	80 - 120
Chromium	20.0	20.4		mg/Kg		102	80 - 120
Cobalt	50.0	48.1		mg/Kg		96	80 - 120
Copper	25.0	23.9		mg/Kg		96	80 - 120
Iron	100	108		mg/Kg		108	80 - 120
Lead	10.0	9.53		mg/Kg		95	80 - 120
Magnesium	1000	939		mg/Kg		94	80 - 120
Manganese	50.0	47.5		mg/Kg		95	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Potassium	1000	935		mg/Kg		93	80 - 120
Selenium	10.0	8.15		mg/Kg		81	80 - 120
Silver	5.00	4.42		mg/Kg		88	80 - 120
Sodium	1000	946		mg/Kg		95	80 - 120
Thallium	10.0	8.80		mg/Kg		88	80 - 120
Vanadium	50.0	48.0		mg/Kg		96	80 - 120

Lab Sample ID: LCS 500-518888/2-A
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518888
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Zinc	50.0	46.9		mg/Kg		94	80 - 120

Lab Sample ID: 500-174115-1 MS
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.51	J F1	27.4	4.63	F1	mg/Kg	☼	15	75 - 125
Arsenic	7.9	F1	5.48	13.7		mg/Kg	☼	105	75 - 125
Barium	33		110	122		mg/Kg	☼	81	75 - 125
Beryllium	0.60		2.74	2.80		mg/Kg	☼	80	75 - 125
Boron	18		54.8	62.3		mg/Kg	☼	82	75 - 125
Cadmium	0.086	J B	2.74	2.18		mg/Kg	☼	76	75 - 125
Chromium	17	B	11.0	27.6		mg/Kg	☼	96	75 - 125
Cobalt	15		27.4	42.0		mg/Kg	☼	100	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174115-1 MS
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Copper	29	F1	13.7	39.0	F1	mg/Kg	☼	72		75 - 125
Iron	19000		54.8	19800	4	mg/Kg	☼	1894		75 - 125
Lead	16	F1	5.48	20.4	F1	mg/Kg	☼	71		75 - 125
Magnesium	26000	B	548	24900	4	mg/Kg	☼	-209		75 - 125
Manganese	360		27.4	366	4	mg/Kg	☼	19		75 - 125
Nickel	39	B	27.4	65.2		mg/Kg	☼	97		75 - 125
Potassium	3100		548	4880	4	mg/Kg	☼	331		75 - 125
Selenium	0.50	J F1	5.48	4.45	F1	mg/Kg	☼	72		75 - 125
Silver	1.9		2.74	4.19		mg/Kg	☼	82		75 - 125
Sodium	860		548	1300		mg/Kg	☼	81		75 - 125
Thallium	0.93		5.48	5.18		mg/Kg	☼	78		75 - 125
Vanadium	20		27.4	47.7		mg/Kg	☼	102		75 - 125

Lab Sample ID: 500-174115-1 MS
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Zinc	50		27.4	76.5		mg/Kg	☼	95		75 - 125

Lab Sample ID: 500-174115-1 MS
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Calcium	56000	B	548	54400	4	mg/Kg	☼	-291		75 - 125

Lab Sample ID: 500-174115-1 MSD
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Antimony	0.51	J F1	28.1	4.87	F1	mg/Kg	☼	15		75 - 125	5	20
Arsenic	7.9	F1	5.62	11.5	F1	mg/Kg	☼	64		75 - 125	17	20
Barium	33		112	127		mg/Kg	☼	84		75 - 125	4	20
Beryllium	0.60		2.81	2.97		mg/Kg	☼	84		75 - 125	6	20
Boron	18		56.2	64.3		mg/Kg	☼	83		75 - 125	3	20
Cadmium	0.086	J B	2.81	2.23		mg/Kg	☼	76		75 - 125	2	20
Chromium	17	B	11.2	28.9		mg/Kg	☼	104		75 - 125	4	20
Cobalt	15		28.1	41.6		mg/Kg	☼	96		75 - 125	1	20
Copper	29	F1	14.1	39.2	F1	mg/Kg	☼	71		75 - 125	0	20
Iron	19000		56.2	19400	4	mg/Kg	☼	1100		75 - 125	2	20
Lead	16	F1	5.62	21.1		mg/Kg	☼	82		75 - 125	3	20
Magnesium	26000	B	562	26600	4	mg/Kg	☼	93		75 - 125	6	20
Manganese	360		28.1	365	4	mg/Kg	☼	15		75 - 125	0	20
Nickel	39	B	28.1	63.5		mg/Kg	☼	88		75 - 125	3	20
Potassium	3100		562	5170	4	mg/Kg	☼	374		75 - 125	6	20
Selenium	0.50	J F1	5.62	4.24	F1	mg/Kg	☼	66		75 - 125	5	20
Silver	1.9		2.81	4.45		mg/Kg	☼	89		75 - 125	6	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174115-1 MSD
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Sodium	860		562	1340		mg/Kg	☼	86	75 - 125	3	20
Thallium	0.93		5.62	5.17		mg/Kg	☼	75	75 - 125	0	20
Vanadium	20		28.1	49.2		mg/Kg	☼	104	75 - 125	3	20

Lab Sample ID: 500-174115-1 MSD
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Zinc	50		28.1	73.3		mg/Kg	☼	81	75 - 125	4	20

Lab Sample ID: 500-174115-1 MSD
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Calcium	56000	B	562	55900	4	mg/Kg	☼	-26	75 - 125	3	20

Lab Sample ID: 500-174115-1 DU
Matrix: Solid
Analysis Batch: 519055

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
Antimony	0.51	J F1	0.673	J F5	mg/Kg	☼	27	20
Arsenic	7.9	F1	7.85		mg/Kg	☼	1	20
Barium	33		34.8		mg/Kg	☼	5	20
Beryllium	0.60		0.607		mg/Kg	☼	0.6	20
Boron	18		17.5		mg/Kg	☼	0.4	20
Cadmium	0.086	J B	0.0861	J	mg/Kg	☼	0.2	20
Chromium	17	B	17.6		mg/Kg	☼	2	20
Cobalt	15		14.8		mg/Kg	☼	0.6	20
Copper	29	F1	28.7		mg/Kg	☼	2	20
Iron	19000		18900		mg/Kg	☼	1	20
Lead	16	F1	15.8		mg/Kg	☼	4	20
Magnesium	26000	B	24600		mg/Kg	☼	6	20
Manganese	360		362		mg/Kg	☼	0.3	20
Nickel	39	B	39.1		mg/Kg	☼	1	20
Potassium	3100		3160		mg/Kg	☼	3	20
Selenium	0.50	J F1	0.808	F5	mg/Kg	☼	47	20
Silver	1.9		1.96		mg/Kg	☼	0.9	20
Sodium	860		888		mg/Kg	☼	4	20
Thallium	0.93		1.03		mg/Kg	☼	10	20
Vanadium	20		19.9		mg/Kg	☼	0.5	20

Lab Sample ID: 500-174115-1 DU
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
Zinc	50		44.3		mg/Kg	☼	13	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6010B - Metals (ICP)

Lab Sample ID: 500-174115-1 DU
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B22 (0-6)
Prep Type: Total/NA
Prep Batch: 518888

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Calcium	56000	B	53300		mg/Kg	✱	5	20

Lab Sample ID: LCS 500-518996/2-A
Matrix: Solid
Analysis Batch: 519453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518996
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.459	J	mg/L		92	80 - 120
Beryllium	0.0500	0.0442		mg/L		88	80 - 120
Boron	1.00	0.833		mg/L		83	80 - 120
Cadmium	0.0500	0.0487		mg/L		97	80 - 120
Chromium	0.200	0.186		mg/L		93	80 - 120
Cobalt	0.500	0.471		mg/L		94	80 - 120
Iron	1.00	0.985		mg/L		98	80 - 120
Lead	0.100	0.0936		mg/L		94	80 - 120
Manganese	0.500	0.435		mg/L		87	80 - 120
Nickel	0.500	0.468		mg/L		94	80 - 120
Selenium	0.100	0.0956		mg/L		96	80 - 120
Silver	0.0500	0.0486		mg/L		97	80 - 120
Zinc	0.500	0.518		mg/L		104	80 - 120

Lab Sample ID: LCS 500-519011/2-A
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519011
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.468		mg/L		94	80 - 120
Nickel	0.500	0.472		mg/L		94	80 - 120

Lab Sample ID: LB 500-518666/1-B
Matrix: Solid
Analysis Batch: 519453

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518996

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 00:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:43	12/07/19 00:59	1
Boron	<0.50		0.50	0.050	mg/L		12/05/19 15:43	12/07/19 00:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:43	12/07/19 00:59	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 00:59	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 00:59	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:43	12/07/19 00:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:43	12/07/19 00:59	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 00:59	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 00:59	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:43	12/07/19 00:59	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:43	12/07/19 00:59	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:43	12/07/19 00:59	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174115-20 MS
Matrix: Solid
Analysis Batch: 519453

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: TCLP
Prep Batch: 518996

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Barium	0.64	F1	0.500	0.843	F1	mg/L		41	75 - 125
Beryllium	<0.0040	F1	0.0500	0.0352	F1	mg/L		70	75 - 125
Boron	0.089	J F1	1.00	0.720	F1	mg/L		63	75 - 125
Cadmium	<0.0050	F1	0.0500	0.0372	F1	mg/L		74	75 - 125
Chromium	<0.025	F1	0.200	0.142	F1	mg/L		71	75 - 125
Cobalt	0.014	J F1	0.500	0.368	F1	mg/L		71	75 - 125
Iron	<0.40		1.00	0.763		mg/L		76	75 - 125
Lead	<0.0075	F1	0.100	0.0736	F1	mg/L		74	75 - 125
Manganese	1.8	F1	0.500	1.73	F1	mg/L		-17	75 - 125
Nickel	0.035	F1	0.500	0.380	F1	mg/L		69	75 - 125
Selenium	<0.050		0.100	0.0772		mg/L		77	75 - 125
Silver	<0.025		0.0500	0.0403		mg/L		81	75 - 125
Zinc	<0.50		0.500	0.380	J	mg/L		76	75 - 125

Lab Sample ID: 500-174115-20 DU
Matrix: Solid
Analysis Batch: 519453

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: TCLP
Prep Batch: 518996

Analyte	Sample	Sample	DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Barium	0.64	F1	0.657		mg/L		3	20
Beryllium	<0.0040	F1	<0.0040		mg/L		NC	20
Boron	0.089	J F1	0.0938	J	mg/L		5	20
Cadmium	<0.0050	F1	<0.0050		mg/L		NC	20
Chromium	<0.025	F1	<0.025		mg/L		NC	20
Cobalt	0.014	J F1	0.0141	J	mg/L		4	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075	F1	<0.0075		mg/L		NC	20
Manganese	1.8	F1	1.87		mg/L		3	20
Nickel	0.035	F1	0.0353		mg/L		0.3	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50		<0.50		mg/L		NC	20

Lab Sample ID: LB 500-518665/1-B
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 519011

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 19:49	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 16:13	12/06/19 19:49	1

Lab Sample ID: 500-174115-20 MS
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: SPLP East
Prep Batch: 519011

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Manganese	0.017	J	0.500	0.481		mg/L		93	75 - 125
Nickel	<0.025		0.500	0.478		mg/L		96	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174115-20 DU
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: SPLP East
Prep Batch: 519011

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.017	J	0.0157	J	mg/L		8	20
Nickel	<0.025		<0.025		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-518996/2-A
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518996
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Thallium	0.100	0.108		mg/L		108	80 - 120

Lab Sample ID: LCS 500-518996/2-A
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518996
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.533		mg/L		107	80 - 120

Lab Sample ID: LB 500-518666/1-B
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518996

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:43	12/06/19 20:08	1

Lab Sample ID: LB 500-518666/1-B
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518996

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:43	12/09/19 12:34	1

Lab Sample ID: 500-174115-20 MS
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: TCLP
Prep Batch: 518996
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Thallium	<0.0020		0.100	0.106		mg/L		106	75 - 125

Lab Sample ID: 500-174115-20 MS
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: TCLP
Prep Batch: 518996
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.551		mg/L		110	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-174115-20 DU
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: TCLP
Prep Batch: 518996

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: 500-174115-20 DU
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: 2615V2-AI-B19 (24-30)
Prep Type: TCLP
Prep Batch: 518996

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-519136/12-A
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519136

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:27	1

Lab Sample ID: LCS 500-519136/13-A
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519136
%Rec. Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00206		mg/L		103	80 - 120

Lab Sample ID: LB 500-518666/1-C
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519136

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 08:35	1

Lab Sample ID: 500-174115-10 MS
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: 2615V2-AI-B21 (24-30)
Prep Type: TCLP
Prep Batch: 519136
%Rec. Limits

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000978		mg/L		98	75 - 125

Lab Sample ID: 500-174115-10 DU
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: 2615V2-AI-B21 (24-30)
Prep Type: TCLP
Prep Batch: 519136

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-518874/12-A
Matrix: Solid
Analysis Batch: 519170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/05/19 13:05	12/06/19 07:35	1

Lab Sample ID: LCS 500-518874/13-A
Matrix: Solid
Analysis Batch: 519170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.168		mg/Kg		101	80 - 120

Lab Sample ID: 500-174115-10 MS
Matrix: Solid
Analysis Batch: 519170

Client Sample ID: 2615V2-AI-B21 (24-30)
Prep Type: Total/NA
Prep Batch: 518874

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.017	J	0.0985	0.103		mg/Kg	☼	87	75 - 125

Lab Sample ID: 500-174115-10 MSD
Matrix: Solid
Analysis Batch: 519170

Client Sample ID: 2615V2-AI-B21 (24-30)
Prep Type: Total/NA
Prep Batch: 518874

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.017	J	0.0985	0.111		mg/Kg	☼	95	75 - 125	7	20

Lab Sample ID: 500-174115-10 DU
Matrix: Solid
Analysis Batch: 519170

Client Sample ID: 2615V2-AI-B21 (24-30)
Prep Type: Total/NA
Prep Batch: 518874

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.017	J	0.0180	J	mg/Kg	☼	3	20

Method: 9045D - pH

Lab Sample ID: 500-174115-4 DU
Matrix: Solid
Analysis Batch: 518090

Client Sample ID: 2615V2-AI-B22 (18-24)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.1		8.1		SU		0.1	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Date Collected: 11/25/19 09:22

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 19:57	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:08	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:16	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 12:41	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:39	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:12		
					(End)	12/02/19 15:15		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B22 (0-6)

Lab Sample ID: 500-174115-1

Date Collected: 11/25/19 09:22

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 12:55	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519390	12/09/19 04:42	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 00:47	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 18:24	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 18:29	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:39	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:01	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:13	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:20	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 12:44	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:41	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:15		
					(End)	12/02/19 15:18		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B22 (6-12)

Lab Sample ID: 500-174115-2

Date Collected: 11/25/19 09:33

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 13:21	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519390	12/09/19 04:15	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:19	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 19:17	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 19:21	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:41	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:05	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:17	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:23	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 12:47	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:42	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:18		
					(End)	12/02/19 15:21		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B22 (12-18)

Lab Sample ID: 500-174115-3

Date Collected: 11/25/19 09:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 13:47	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 00:02	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:23	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 19:26	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 19:30	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:44	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:09	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:22	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:27	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 12:51	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:44	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:23		
					(End)	12/02/19 15:26		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B22 (18-24)

Lab Sample ID: 500-174115-4

Date Collected: 11/25/19 09:45

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 14:13	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 00:25	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:27	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 19:35	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:46	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:13	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:40	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:31	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 12:54	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:46	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:29		
					(End)	12/02/19 15:32		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B22 (24-30)

Lab Sample ID: 500-174115-5

Date Collected: 11/25/19 09:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 14:39	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 00:48	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:31	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 19:52	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 19:57	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:48	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:17	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:45	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:35	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 12:58	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:47	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B21 (0-6)

Lab Sample ID: 500-174115-6

Date Collected: 11/25/19 10:40

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 15:04	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 01:11	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:35	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:01	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:50	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Date Collected: 11/25/19 10:54

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:21	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:49	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:38	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:01	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:49	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:35		
					(End)	12/02/19 15:37		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (6-12)

Lab Sample ID: 500-174115-7

Date Collected: 11/25/19 10:54

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 15:30	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 01:34	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:39	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:06	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 20:10	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:52	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:25	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:54	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:42	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:05	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 08:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:37		
					(End)	12/02/19 15:40		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 15:56	PMF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (12-18)

Lab Sample ID: 500-174115-8

Date Collected: 11/25/19 10:58

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 01:56	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:43	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:15	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 20:19	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 07:59	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:37	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 01:59	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:53	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:15	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:05	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:40		
					(End)	12/02/19 15:43		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 16:22	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 02:19	NRJ	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (18-24)

Lab Sample ID: 500-174115-9

Date Collected: 11/25/19 11:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:47	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:23	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 20:28	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:01	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:41	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:04	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 20:57	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:18	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:07	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090	(Start) 12/02/19 15:43 (End) 12/02/19 15:46	JJB	TAL CHI
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 16:48	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 02:42	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 01:51	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B21 (24-30)

Lab Sample ID: 500-174115-10

Date Collected: 11/25/19 11:15

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:46	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 20:50	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:03	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:46	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:08	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:01	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:22	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:11	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:46		
					(End)	12/02/19 15:48		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 17:14	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 03:05	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:04	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:55	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (0-6)

Lab Sample ID: 500-174115-11

Date Collected: 11/25/19 12:20

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:11	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Date Collected: 11/25/19 12:30

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:50	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:13	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:05	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:25	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:14	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:48		
					(End)	12/02/19 15:51		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B20 (6-12)

Lab Sample ID: 500-174115-12

Date Collected: 11/25/19 12:30

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 17:39	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 03:28	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:08	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 20:59	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 21:04	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:13	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Date Collected: 11/25/19 12:35

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:54	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:18	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:09	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:29	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:15	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:54		
					(End)	12/02/19 15:57		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B20 (12-18)

Lab Sample ID: 500-174115-13

Date Collected: 11/25/19 12:35

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 18:05	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 03:51	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:12	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 21:08	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 21:13	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:15	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 20:58	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:22	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:12	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:32	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:17	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:57		
					(End)	12/02/19 15:59		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B20 (18-24)

Lab Sample ID: 500-174115-14

Date Collected: 11/25/19 12:43

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 18:31	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 04:13	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:16	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 21:17	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 21:21	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:18	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 21:02	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:36	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:16	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:36	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:18	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 15:59		
					(End)	12/02/19 16:02		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B20 (24-30)

Lab Sample ID: 500-174115-15

Date Collected: 11/25/19 12:49

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 18:57	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 04:36	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:20	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 21:26	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 21:39	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:24	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 21:06	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:41	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:20	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:39	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:20	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 16:02		
					(End)	12/02/19 16:05		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B19 (0-6)

Lab Sample ID: 500-174115-16

Date Collected: 11/25/19 13:42

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 19:23	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 04:59	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:24	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 21:43	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:26	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 21:10	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:46	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:24	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:43	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:25	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090	JJB	TAL CHI	
					(Start)	12/02/19 16:05		
					(End)	12/02/19 16:08		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B19 (6-12)

Lab Sample ID: 500-174115-17

Date Collected: 11/25/19 13:50

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 19:49	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 05:22	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:28	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 21:48	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 21:53	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:28	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 21:14	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:50	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:27	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 13:46	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:27	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B19 (12-18)

Lab Sample ID: 500-174115-18

Date Collected: 11/25/19 13:55

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518847	12/05/19 20:14	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 05:45	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:32	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 21:57	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 22:01	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:30	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Date Collected: 11/25/19 14:01

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 21:26	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 02:55	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:39	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 14:21	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 16:10		
					(End)	12/02/19 16:13		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (18-24)

Lab Sample ID: 500-174115-19

Date Collected: 11/25/19 14:01

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518849	12/05/19 11:42	PMF	TAL CHI
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 06:08	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:36	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 22:06	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 22:10	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:32	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518665	12/04/19 11:00	GCA	TAL CHI
SPLP East	Prep	3010A			519011	12/05/19 16:13	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519451	12/06/19 21:30	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6010B		1	519453	12/07/19 03:00	EEN	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 21:42	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518996	12/05/19 15:43	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 14:26	FXG	TAL CHI
TCLP	Leach	1311			518666	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519136	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:30	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518090		JJB	TAL CHI
					(Start)	12/02/19 16:13		
					(End)	12/02/19 16:16		
Total/NA	Analysis	Moisture		1	518183	12/02/19 12:17	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518900	11/26/19 19:16	PMF	TAL CHI
Total/NA	Analysis	8260B		1	518849	12/05/19 12:07	PMF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Client Sample ID: 2615V2-AI-B19 (24-30)

Lab Sample ID: 500-174115-20

Date Collected: 11/25/19 14:08

Matrix: Solid

Date Received: 11/25/19 15:10

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			519203	12/06/19 14:00	DX	TAL CHI
Total/NA	Analysis	8270D		1	519402	12/09/19 06:30	NRJ	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519055	12/06/19 02:40	JEF	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		1	519452	12/06/19 22:15	EEN	TAL CHI
Total/NA	Prep	3050B			518888	12/05/19 08:52	LMN	TAL CHI
Total/NA	Analysis	6010B		10	519452	12/06/19 22:19	EEN	TAL CHI
Total/NA	Prep	7471B			518874	12/05/19 13:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519170	12/06/19 08:35	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174115-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

THE LEADER IN ENVIRONMENTAL T

2417 Bond Street, University Park, IL 6048
Phone: 708.534.5200 Fax: 708.534.5



500-174115 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174115
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 5.8; 4.7

Client		Project Name		Project Location/State		Sampler		Client Project #		Lab Project #		Lab PM		Preservative		Parameter		Preservative Key	
E+L		176-001-W047E		Chicago, IL		AT, JH		1009341.0447.01		R. Wright								1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total/Trace Metals	pH	Percent Solids	Comments							
			Date	Time															
1		2615V2-AT-B22(0-6)	11/25/19	0922	5	S	X	X	X	X	X								
2		2615V2-AT-B22(6-12)	11/25/19	0933	5	S	X	X	X	X	X								
3		2615V2-AT-B22(12-18)	11/25/19	0940	5	S	X	X	X	X	X								
4		2615V2-AT-B22(18-24)	11/25/19	0945	4	S	X	X	X	X	X								
5		2615V2-AT-B22(24-30)	11/25/19	0950	5	S	X	X	X	X	X								
6		2615V2-AT-B21(0-6)	11/25/19	1040	5	S	X	X	X	X	X								
7		2615V2-AT-B21(6-12)	11/25/19	1054	5	S	X	X	X	X	X								
8		2615V2-AT-B21(12-18)	11/25/19	1058	5	S	X	X	X	X	X								
9		2615V2-AT-B21(18-24)	11/25/19	1108	5	S	X	X	X	X	X								
10		2615V2-AT-B21(24-30)	11/25/19	1115	5	S	X	X	X	X	X								

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>[Signature]</i>	Company E+L	Date 11/25/19	Time 1410	Received By <i>[Signature]</i>	Company TA	Date 11/25/19	Time 1410
Relinquished By <i>[Signature]</i>	Company TA	Date 11/25/19	Time 1510	Received By <i>[Signature]</i>	Company TA-EVE	Date 11/25/19	Time 1510
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Billing To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174115
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter												Preservative Key	
E+E		1009341.0447.01																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Matrix														Comments	
176-001-W047E																			
Project Location/State		Lab PM		# of Containers		Matrix													
Chicago, IL		R. Wright		VOC		SVOC		Total/TeCP Metals		pH		Percent Solids							
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix													
11		2615V2-AI-B20(0-6)	11/25/19	1220	5	S	X	X	X	X	X								
12		2615V2-AI-B20(6-12)	11/25/19	1230	5	S	X	X	X	X	X								
13		2615V2-AI-B20(12-18)	11/25/19	1235	5	S	X	X	X	X	X								
14		2615V2-AI-B20(18-24)	11/25/19	1243	5	S	X	X	X	X	X								
15		2615V2-AI-B20(24-30)	11/25/19	1249	5	S	X	X	X	X	X								
16		2615V2-AI-B19(0-6)	11/25/19	1342	5	S	X	X	X	X	X								
17		2615V2-AI-B19(6-12)	11/25/19	1350	5	S	X	X	X	X	X								
18		2615V2-AI-B19(12-18)	11/25/19	1355	5	S	X	X	X	X	X								
19		2615V2-AI-B19(18-24)	11/25/19	1401	5	S	X	X	X	X	X								
20		2615V2-AI-B19(24-30)	11/25/19	1408	5	S	X	X	X	X	X								

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other

Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>J. Hughes</u>	Company: <u>E+E</u>	Date: <u>11/25/19</u>	Time: <u>1410</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/25/19</u>	Time: <u>1410</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/25/19</u>	Time: <u>1510</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>11/25/19</u>	Time: <u>1510</u>
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____

Lab Courier: TR
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174115-1

Login Number: 174115

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8.4.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174194-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/13/2019 3:59:32 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Job ID: 500-174194-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174194-1

Receipt

The samples were received on 11/26/2019 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.0° C, 3.9° C and 4.9° C.

GC/MS VOA

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range for Method 8260B/5035A_FM and 8260B/5030B_Leach/1311_Z: 2615V2-AI-B13 (0-6) (500-174194-7) and 2615V2-AI-B06 (0-6) (500-174194-17). Elevated reporting limits (RLs) are provided.

Method 8260B: The method blank for analytical batch 519527 contained Chloroform and Styrene above the Method detection limit (MDL) but below reporting limit (RL). Chloroform and Styrene were non-detect in the samples; therefore, no re-analysis was done and the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following sample contained one acid surrogate outside acceptance limits: 2615V2-AI-B05 (6-12)D (500-174194-3). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-518838 and analytical batch 500-519028 recovered outside control limits for the following analytes: 2,2'-oxybis[1-chloropropane], 2-Methylphenol, 2-Nitroaniline, 2-Chlorophenol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, N-Nitrosodi-n-propylamine, Isophorone, Nitrobenzene and Phenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-519101 and analytical batch 500-519246 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol and 2,4,6-Trichlorophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 519281 had 1 analyte outside control limits: Hexachlorocyclopentadiene. These results have been reported and qualified. (LCS 500-519281/2-A)

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-174194-E-1-K MS) and (500-174194-E-1-L MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8151A: The continuing calibration verification (CCV) associated with batch 500-519870 recovered above the upper control limit for Silvex (2,4,5-TP). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 2615V2-AI-B13 (0-6) (500-174194-7), 2615V2-AI-B06 (0-6) (500-174194-17) and (CCV 500-519870/24).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The continuing calibration verification (CCV) at line 45 was outside the control limits for Copper bracketing the method blank (MB) and laboratory control sample (LCS). The MB and LCS was within the method control limits. The associated sample 2615V2-AI-B06 (24-30) (500-174194-21) was bracketed with continuing calibration verifications that were within control limits, therefore

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Job ID: 500-174194-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

the data has been reported.

Method 6010B: The continuing calibration blanks (CCB) contained Iron above the reporting limit (RL). The sample 2615V2-AI-B05 (0-6) (500-174194-1), 2615V2-AI-B05 (6-12) (500-174194-2), 2615V2-AI-B05 (6-12)D (500-174194-3), 2615V2-AI-B05 (12-18) (500-174194-4), 2615V2-AI-B05 (18-24) (500-174194-5), 2615V2-AI-B05 (24-30) (500-174194-6), 2615V2-AI-B13 (0-6) (500-174194-7), 2615V2-AI-B13 (6-12) (500-174194-8), 2615V2-AI-B13 (12-18) (500-174194-9), 2615V2-AI-B13 (18-24) (500-174194-10), 2615V2-AI-B16 (0-6) (500-174194-12), 2615V2-AI-B16 (6-12) (500-174194-13), 2615V2-AI-B16 (12-18) (500-174194-14), 2615V2-AI-B16 (24-30) (500-174194-16), 2615V2-AI-B06 (0-6) (500-174194-17), 2615V2-AI-B06 (6-12) (500-174194-18) and 2615V2-AI-B06 (18-24) (500-174194-20) associated with this CCB did not contain the target compound; therefore, re-analysis of samples was not performed.

Method 6010B: The method blank for preparation batch 500-519024 and analytical batch 500-519450 contained Magnesium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0082	J	0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
Vinyl chloride	0.0055		0.0016	0.00072	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.12	F1 F2	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.80	J F1	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.7	F1	0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	20		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.77		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	F2 B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000		12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	17	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	17		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	23000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	260		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	45		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.77	F1	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	54	F1 F2	1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.075	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0042	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.20	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.57		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0089	J	0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.15		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.6		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.84		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000		12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	19	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12) (Continued)

Lab Sample ID: 500-174194-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	21000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	15000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	250		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	43		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.78		0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	360		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.059		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.13		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.013	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.15		0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.76	J	1.3	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.3		0.63	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.63	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.87		0.25	0.059	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.083	J B	0.13	0.023	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000		13	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	18	B	0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	17		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	35		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	13	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		6.3	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.63	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	47		0.63	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.2		0.63	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		63	9.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.63	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.31	0.074	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.3	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)D (Continued)

Lab Sample ID: 500-174194-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.37	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0094		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.069		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0081	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.029		0.017	0.0073	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.088		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.83	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	16		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.34	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	140		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.27	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.056		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.041	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.018	J	0.025	0.010	mg/L	1		6010B	SPLP East
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0078	J	0.041	0.0064	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.086		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.52	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (18-24) (Continued)

Lab Sample ID: 500-174194-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.5		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	32		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.0		0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	190		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.30	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.027	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.044		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.080		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.021	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.62	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.79		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (24-30) (Continued)

Lab Sample ID: 500-174194-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	40		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.92		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.21	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.029	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.16		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0099	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

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Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Fluorene	0.0066	J	0.041	0.0057	mg/Kg	1	*		8270D	Total/NA
Phenanthrene	0.12		0.041	0.0057	mg/Kg	1	*		8270D	Total/NA
Antimony	0.84	J	1.2	0.23	mg/Kg	1	*		6010B	Total/NA
Arsenic	6.2		0.59	0.20	mg/Kg	1	*		6010B	Total/NA
Barium	35		0.59	0.067	mg/Kg	1	*		6010B	Total/NA
Beryllium	0.65		0.24	0.055	mg/Kg	1	*		6010B	Total/NA
Boron	13		3.0	0.28	mg/Kg	1	*		6010B	Total/NA
Cadmium	0.11	J B	0.12	0.021	mg/Kg	1	*		6010B	Total/NA
Calcium	150000		120	20	mg/Kg	10	*		6010B	Total/NA
Chromium	14	B	0.59	0.29	mg/Kg	1	*		6010B	Total/NA
Cobalt	14		0.30	0.077	mg/Kg	1	*		6010B	Total/NA
Copper	26		0.59	0.17	mg/Kg	1	*		6010B	Total/NA
Iron	15000	B	12	6.1	mg/Kg	1	*		6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	*		6010B	Total/NA
Magnesium	15000		5.9	2.9	mg/Kg	1	*		6010B	Total/NA
Manganese	280		0.59	0.086	mg/Kg	1	*		6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	*		6010B	Total/NA
Potassium	2600		30	10	mg/Kg	1	*		6010B	Total/NA
Selenium	0.51	J	0.59	0.35	mg/Kg	1	*		6010B	Total/NA
Silver	1.6		0.30	0.076	mg/Kg	1	*		6010B	Total/NA
Sodium	1200		59	8.7	mg/Kg	1	*		6010B	Total/NA
Thallium	1.3		0.59	0.29	mg/Kg	1	*		6010B	Total/NA
Vanadium	16		0.30	0.070	mg/Kg	1	*		6010B	Total/NA
Zinc	45		1.2	0.52	mg/Kg	1	*		6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1			6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (0-6) (Continued)

Lab Sample ID: 500-174194-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.088		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.23	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.16		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.068	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.80		0.025	0.010	mg/L	1		6010B	SPLP East
Nickel	0.19		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0076	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.036		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.068		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.78	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	5.9		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.85		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.080	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000		12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	20	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.60	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	42		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.92		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	1000		60	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.67		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.22	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	2.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.099		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.066	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.062		0.025	0.010	mg/L	1		6010B	SPLP East
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.026		0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (12-18) (Continued)

Lab Sample ID: 500-174194-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.064		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.93	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.3		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.30	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	76		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.21	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0093		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.054		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.023	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.035		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.090		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.85	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.4		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.75		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.087	J B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17	B	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (18-24) (Continued)

Lab Sample ID: 500-174194-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	310		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.87		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.4		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.33	J B	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.017		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.075		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.049	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.048		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.017	J	0.023	0.010	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.057		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.78	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	19		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.098	J B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18	B	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.65		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.17	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (24-30) (Continued)

Lab Sample ID: 500-174194-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.36	J ^	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.062		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.019	0.0063	mg/Kg	1	✱	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174194-1	2615V2-AI-B05 (0-6)	Solid	11/26/19 09:00	11/26/19 15:25	
500-174194-2	2615V2-AI-B05 (6-12)	Solid	11/26/19 09:53	11/26/19 15:25	
500-174194-3	2615V2-AI-B05 (6-12)D	Solid	11/26/19 09:53	11/26/19 15:25	
500-174194-4	2615V2-AI-B05 (12-18)	Solid	11/26/19 10:00	11/26/19 15:25	
500-174194-5	2615V2-AI-B05 (18-24)	Solid	11/26/19 10:06	11/26/19 15:25	
500-174194-6	2615V2-AI-B05 (24-30)	Solid	11/26/19 10:08	11/26/19 15:25	
500-174194-12	2615V2-AI-B16 (0-6)	Solid	11/26/19 11:57	11/26/19 15:25	
500-174194-13	2615V2-AI-B16 (6-12)	Solid	11/26/19 12:05	11/26/19 15:25	
500-174194-14	2615V2-AI-B16 (12-18)	Solid	11/26/19 12:12	11/26/19 15:25	
500-174194-15	2615V2-AI-B16 (18-24)	Solid	11/26/19 12:22	11/26/19 15:25	
500-174194-16	2615V2-AI-B16 (24-30)	Solid	11/26/19 12:27	11/26/19 15:25	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Date Collected: 11/26/19 09:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Acetone	0.0082	J	0.016	0.0071	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Vinyl chloride	0.0055		0.0016	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	11/27/19 17:40	12/06/19 13:16	1
4-Bromofluorobenzene (Surr)	112		75 - 131	11/27/19 17:40	12/06/19 13:16	1
Dibromofluoromethane	89		75 - 126	11/27/19 17:40	12/06/19 13:16	1
Toluene-d8 (Surr)	98		75 - 124	11/27/19 17:40	12/06/19 13:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	F1 F2	0.20	0.089	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Bis(2-chloroethyl)ether	<0.20	F1 F2	0.20	0.060	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
1,3-Dichlorobenzene	<0.20	F1 F2	0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
1,4-Dichlorobenzene	<0.20	F1 F2	0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Date Collected: 11/26/19 09:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20	F1 F2	0.20	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2-Methylphenol	<0.20	F1 F2	0.20	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,2'-oxybis[1-chloropropane]	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
N-Nitrosodi-n-propylamine	<0.081	F1 F2	0.081	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Hexachloroethane	<0.20	F1 F2	0.20	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2-Chlorophenol	<0.20	F1 F2	0.20	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Nitrobenzene	<0.040	F1 F2	0.040	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Bis(2-chloroethoxy)methane	<0.20	F1 F2	0.20	0.041	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
1,2,4-Trichlorobenzene	<0.20	F1 F2	0.20	0.043	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Isophorone	<0.20	F1 F2	0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,4-Dimethylphenol	<0.40	F1 F2	0.40	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Hexachlorobutadiene	<0.20	F1 F2	0.20	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Naphthalene	<0.040	F1 F2	0.040	0.0062	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,4-Dichlorophenol	<0.40	F1 F2	0.40	0.096	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4-Chloroaniline	<0.81	F1 F2	0.81	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,4,6-Trichlorophenol	<0.40	F1 F2	0.40	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,4,5-Trichlorophenol	<0.40	F1 F2	0.40	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Hexachlorocyclopentadiene	<0.81	F1 *	0.81	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2-Methylnaphthalene	<0.081	F1 F2	0.081	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2-Nitroaniline	<0.20	F1 F2	0.20	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2-Chloronaphthalene	<0.20	F1 F2	0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4-Chloro-3-methylphenol	<0.40	F1 F2	0.40	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,6-Dinitrotoluene	<0.20	F1 F2	0.20	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2-Nitrophenol	<0.40	F1 F2	0.40	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
3-Nitroaniline	<0.40	F2	0.40	0.12	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Dimethyl phthalate	<0.20	F1 F2	0.20	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,4-Dinitrophenol	<0.81	F1	0.81	0.71	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Acenaphthylene	<0.040	F1 F2	0.040	0.0053	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
2,4-Dinitrotoluene	<0.20	F1 F2	0.20	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Acenaphthene	<0.040	F1 F2	0.040	0.0072	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Dibenzofuran	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4-Nitrophenol	<0.81	F1	0.81	0.38	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Fluorene	<0.040	F1 F2	0.040	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4-Nitroaniline	<0.40	F1 F2	0.40	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4-Bromophenyl phenyl ether	<0.20	F1 F2	0.20	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Hexachlorobenzene	<0.081	F1 F2	0.081	0.0093	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Diethyl phthalate	<0.20	F1 F2	0.20	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4-Chlorophenyl phenyl ether	<0.20	F1 F2	0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Pentachlorophenol	<0.81	F1	0.81	0.65	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
N-Nitrosodiphenylamine	<0.20	F1 F2	0.20	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
4,6-Dinitro-2-methylphenol	<0.81	F1	0.81	0.32	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Phenanthrene	0.12	F1 F2	0.040	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Anthracene	<0.040	F1 F2	0.040	0.0067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Carbazole	<0.20	F1 F2	0.20	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Di-n-butyl phthalate	<0.20	F1 F2	0.20	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Fluoranthene	<0.040	F1 F2	0.040	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Pyrene	<0.040	F1 F2	0.040	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Butyl benzyl phthalate	<0.20	F1 F2	0.20	0.077	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Benzof[a]anthracene	<0.040	F1 F2	0.040	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Date Collected: 11/26/19 09:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040	F1 F2	0.040	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
3,3'-Dichlorobenzidine	<0.20	F1 F2	0.20	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Bis(2-ethylhexyl) phthalate	<0.20	F1 F2	0.20	0.074	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Di-n-octyl phthalate	<0.20	F1 F2	0.20	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Benzo[b]fluoranthene	<0.040	F1 F2	0.040	0.0087	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Benzo[k]fluoranthene	<0.040	F1 F2	0.040	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Benzo[a]pyrene	<0.040	F1 F2	0.040	0.0078	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Indeno[1,2,3-cd]pyrene	<0.040	F1 F2	0.040	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Dibenz(a,h)anthracene	<0.040	F1 F2	0.040	0.0078	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Benzo[g,h,i]perylene	<0.040	F1 F2	0.040	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
3 & 4 Methylphenol	<0.20	F1 F2	0.20	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	77		31 - 166				12/06/19 18:03	12/07/19 19:52	1
Phenol-d5	69		30 - 153				12/06/19 18:03	12/07/19 19:52	1
Nitrobenzene-d5	76		37 - 147				12/06/19 18:03	12/07/19 19:52	1
2-Fluorobiphenyl	96		43 - 145				12/06/19 18:03	12/07/19 19:52	1
2,4,6-Tribromophenol	53		31 - 143				12/06/19 18:03	12/07/19 19:52	1
Terphenyl-d14	100		42 - 157				12/06/19 18:03	12/07/19 19:52	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.80	J F1	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Arsenic	8.7	F1	0.58	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Barium	20		0.58	0.066	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Beryllium	0.77		0.23	0.054	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Boron	14		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Cadmium	0.14	F2 B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Calcium	28000		12	2.0	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Chromium	17	B	0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Cobalt	17		0.29	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Copper	33		0.58	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Iron	23000	B	12	6.0	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Lead	17		0.29	0.13	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Magnesium	19000		5.8	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Manganese	260		0.58	0.084	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Nickel	45		0.58	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Potassium	2700		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Selenium	0.77	F1	0.58	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Silver	2.4		0.29	0.075	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Sodium	1200		58	8.6	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Vanadium	19		0.29	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1
Zinc	54	F1 F2	1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 17:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.34	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:27	1
Boron	0.075	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Date Collected: 11/26/19 09:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0042	J	0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:27	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:27	1
Iron	0.20	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:27	1
Manganese	2.4		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:27	1
Nickel	0.037		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:27	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:27	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.57		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:13	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:11	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0064	mg/Kg	☼	12/06/19 13:50	12/09/19 08:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 12:00	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Acetone	0.0089	J	0.016	0.0071	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Carbon disulfide	<0.0041		0.0041	0.00084	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 13:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/27/19 17:40	12/06/19 13:42	1
4-Bromofluorobenzene (Surr)	121		75 - 131	11/27/19 17:40	12/06/19 13:42	1
Dibromofluoromethane	88		75 - 126	11/27/19 17:40	12/06/19 13:42	1
Toluene-d8 (Surr)	101		75 - 124	11/27/19 17:40	12/06/19 13:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Hexachlorocyclopentadiene	<0.80 *		0.80	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Phenanthrene	0.15		0.039	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		31 - 166				12/06/19 18:03	12/07/19 18:56	1
Phenol-d5	74		30 - 153				12/06/19 18:03	12/07/19 18:56	1
Nitrobenzene-d5	91		37 - 147				12/06/19 18:03	12/07/19 18:56	1
2-Fluorobiphenyl	105		43 - 145				12/06/19 18:03	12/07/19 18:56	1
2,4,6-Tribromophenol	47		31 - 143				12/06/19 18:03	12/07/19 18:56	1
Terphenyl-d14	99		42 - 157				12/06/19 18:03	12/07/19 18:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Arsenic	5.6		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Barium	31		0.59	0.067	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Beryllium	0.84		0.23	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Boron	17		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Cadmium	0.10	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Calcium	23000		12	2.0	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Chromium	19	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Cobalt	15		0.29	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Copper	31		0.59	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Iron	21000	B	12	6.1	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Lead	16		0.29	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Magnesium	15000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Manganese	250		0.59	0.085	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Nickel	43		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Potassium	3300		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Selenium	0.78		0.59	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Silver	2.3		0.29	0.075	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Sodium	360		59	8.7	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Vanadium	21		0.29	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1
Zinc	55		1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 18:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:32	1
Boron	0.11	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:32	1
Cobalt	0.059		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:32	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:32	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:32	1
Nickel	0.13		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:32	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:32	1
Zinc	0.024	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:32	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:26	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:26	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.019	0.0062	mg/Kg	☼	12/06/19 13:50	12/09/19 08:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/03/19 12:09	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,1-Dichloroethene	<0.0018		0.0018	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Bromodichloromethane	<0.0018		0.0018	0.00038	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Carbon tetrachloride	<0.0018		0.0018	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Toluene	<0.0018		0.0018	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Vinyl chloride	<0.0018		0.0018	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/27/19 17:40	12/06/19 14:08	1
4-Bromofluorobenzene (Surr)	109		75 - 131	11/27/19 17:40	12/06/19 14:08	1
Dibromofluoromethane	86		75 - 126	11/27/19 17:40	12/06/19 14:08	1
Toluene-d8 (Surr)	98		75 - 124	11/27/19 17:40	12/06/19 14:08	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Hexachlorocyclopentadiene	<0.85 *		0.85	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Phenanthrene	0.15		0.042	0.0059	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Benzof[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166				12/06/19 18:03	12/07/19 19:24	1
Phenol-d5	63		30 - 153				12/06/19 18:03	12/07/19 19:24	1
Nitrobenzene-d5	75		37 - 147				12/06/19 18:03	12/07/19 19:24	1
2-Fluorobiphenyl	90		43 - 145				12/06/19 18:03	12/07/19 19:24	1
2,4,6-Tribromophenol	25	X	31 - 143				12/06/19 18:03	12/07/19 19:24	1
Terphenyl-d14	85		42 - 157				12/06/19 18:03	12/07/19 19:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J	1.3	0.24	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Arsenic	9.3		0.63	0.21	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Barium	37		0.63	0.071	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Beryllium	0.87		0.25	0.059	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Boron	18		3.1	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Cadmium	0.083	J B	0.13	0.023	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Calcium	29000		13	2.1	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Chromium	18	B	0.63	0.31	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Cobalt	17		0.31	0.082	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Copper	35		0.63	0.18	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Iron	22000	B	13	6.5	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Lead	18		0.31	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Magnesium	18000		6.3	3.1	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Manganese	280		0.63	0.091	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Nickel	47		0.63	0.18	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Potassium	3200		31	11	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Selenium	1.2		0.63	0.37	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Silver	2.2		0.31	0.081	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Sodium	210		63	9.3	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Thallium	1.4		0.63	0.31	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Vanadium	20		0.31	0.074	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1
Zinc	51		1.3	0.55	mg/Kg	☼	12/05/19 18:06	12/06/19 18:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:36	1
Boron	0.098	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:36	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:36	1
Cobalt	0.026		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:36	1
Iron	0.37	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:36	1
Lead	0.0094		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:36	1
Manganese	1.9		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:36	1
Nickel	0.069		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:36	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:36	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:36	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:36	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:37	12/10/19 04:30	1
Manganese	0.029		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:30	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0081	J	0.020	0.0065	mg/Kg	☼	12/06/19 13:50	12/09/19 08:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/03/19 12:13	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Acetone	0.029		0.017	0.0073	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/27/19 17:40	12/06/19 14:33	1
4-Bromofluorobenzene (Surr)	107		75 - 131	11/27/19 17:40	12/06/19 14:33	1
Dibromofluoromethane	88		75 - 126	11/27/19 17:40	12/06/19 14:33	1
Toluene-d8 (Surr)	98		75 - 124	11/27/19 17:40	12/06/19 14:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Phenanthrene	0.088		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	77		31 - 166	12/06/19 18:03	12/07/19 16:39	1
Phenol-d5	69		30 - 153	12/06/19 18:03	12/07/19 16:39	1
Nitrobenzene-d5	83		37 - 147	12/06/19 18:03	12/07/19 16:39	1
2-Fluorobiphenyl	94		43 - 145	12/06/19 18:03	12/07/19 16:39	1
2,4,6-Tribromophenol	47		31 - 143	12/06/19 18:03	12/07/19 16:39	1
Terphenyl-d14	94		42 - 157	12/06/19 18:03	12/07/19 16:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.83	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Arsenic	7.6		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Barium	40		0.59	0.068	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Beryllium	0.67		0.24	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Boron	16		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Cadmium	0.34	B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Calcium	54000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 10:39	10
Chromium	18	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Copper	27		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Iron	20000	B	12	6.2	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Lead	15		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Manganese	310		0.59	0.086	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Nickel	38		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Potassium	2900		30	11	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Selenium	0.59		0.59	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Silver	2.2		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Sodium	180		59	8.8	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Thallium	1.3		0.59	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Vanadium	20		0.30	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1
Zinc	140		1.2	0.52	mg/Kg	☼	12/05/19 18:06	12/06/19 18:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:40	1
Boron	0.11	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:40	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:40	1
Cobalt	0.018	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:40	1
Iron	0.27	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:40	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:40	1
Nickel	0.056		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:40	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:40	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:40	1
Zinc	0.041	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:40	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.018	J	0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:22	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	0.0066	mg/Kg	☼	12/06/19 13:50	12/09/19 08:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 12:17	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Date Collected: 11/26/19 10:06

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00091	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,1-Dichloroethane	<0.0021		0.0021	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,1-Dichloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,2-Dichloroethane	<0.0053		0.0053	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00075	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
2-Butanone (MEK)	<0.0053		0.0053	0.0024	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Acetone	<0.021		0.021	0.0093	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Carbon tetrachloride	<0.0021		0.0021	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Chlorobenzene	<0.0021		0.0021	0.00079	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Chloroform	<0.0021		0.0021	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Dibromochloromethane	<0.0021		0.0021	0.00070	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Tetrachloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Toluene	<0.0021		0.0021	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00094	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00075	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Vinyl acetate	<0.0053		0.0053	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Vinyl chloride	<0.0021		0.0021	0.00094	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1
Xylenes, Total	<0.0043		0.0043	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/27/19 17:40	12/06/19 14:59	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/27/19 17:40	12/06/19 14:59	1
Dibromofluoromethane	86		75 - 126	11/27/19 17:40	12/06/19 14:59	1
Toluene-d8 (Surr)	98		75 - 124	11/27/19 17:40	12/06/19 14:59	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Date Collected: 11/26/19 10:06

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Naphthalene	0.0078	J	0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Hexachlorocyclopentadiene	<0.84	*	0.84	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Pentachlorophenol	<0.84		0.84	0.66	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Phenanthrene	0.086		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Benzof[anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Date Collected: 11/26/19 10:06

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	74		31 - 166				12/06/19 18:03	12/07/19 17:06	1
Phenol-d5	67		30 - 153				12/06/19 18:03	12/07/19 17:06	1
Nitrobenzene-d5	75		37 - 147				12/06/19 18:03	12/07/19 17:06	1
2-Fluorobiphenyl	88		43 - 145				12/06/19 18:03	12/07/19 17:06	1
2,4,6-Tribromophenol	43		31 - 143				12/06/19 18:03	12/07/19 17:06	1
Terphenyl-d14	94		42 - 157				12/06/19 18:03	12/07/19 17:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J	1.2	0.24	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Arsenic	7.5		0.62	0.21	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Barium	41		0.62	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Beryllium	0.75		0.25	0.058	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Boron	18		3.1	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Cadmium	0.30	B	0.12	0.022	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Calcium	59000		120	21	mg/Kg	☼	12/05/19 18:06	12/09/19 10:43	10
Chromium	18	B	0.62	0.31	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Cobalt	14		0.31	0.081	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Copper	32		0.62	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Iron	20000	B	12	6.4	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Lead	15		0.31	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Magnesium	25000		6.2	3.1	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Manganese	340		0.62	0.090	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Nickel	38		0.62	0.18	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Potassium	3100		31	11	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Selenium	1.0		0.62	0.36	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Silver	2.3		0.31	0.080	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Sodium	190		62	9.2	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Thallium	1.1		0.62	0.31	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Vanadium	21		0.31	0.073	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1
Zinc	190		1.2	0.54	mg/Kg	☼	12/05/19 18:06	12/06/19 18:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:52	1
Boron	0.13	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:52	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Date Collected: 11/26/19 10:06

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:52	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:52	1
Cobalt	0.013	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:52	1
Iron	0.30	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:52	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:52	1
Nickel	0.043		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:52	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:52	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:52	1
Zinc	0.027	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:52	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.044		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:38	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:25	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.020	0.0068	mg/Kg	☼	12/06/19 13:50	12/09/19 08:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/03/19 12:21	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Date Collected: 11/26/19 10:08

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	11/27/19 17:40	12/06/19 15:24	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/27/19 17:40	12/06/19 15:24	1
Dibromofluoromethane	88		75 - 126	11/27/19 17:40	12/06/19 15:24	1
Toluene-d8 (Surr)	97		75 - 124	11/27/19 17:40	12/06/19 15:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Date Collected: 11/26/19 10:08

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Hexachlorocyclopentadiene	<0.82 *		0.82	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Phenanthrene	0.080		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Date Collected: 11/26/19 10:08

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.021	J	0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 17:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		31 - 166				12/06/19 18:03	12/07/19 17:34	1
Phenol-d5	70		30 - 153				12/06/19 18:03	12/07/19 17:34	1
Nitrobenzene-d5	79		37 - 147				12/06/19 18:03	12/07/19 17:34	1
2-Fluorobiphenyl	96		43 - 145				12/06/19 18:03	12/07/19 17:34	1
2,4,6-Tribromophenol	50		31 - 143				12/06/19 18:03	12/07/19 17:34	1
Terphenyl-d14	99		42 - 157				12/06/19 18:03	12/07/19 17:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Arsenic	8.9		0.58	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Barium	39		0.58	0.066	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Beryllium	0.79		0.23	0.054	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Boron	17		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Cadmium	0.090	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Calcium	52000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 10:55	10
Chromium	18	B	0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Cobalt	16		0.29	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Copper	28		0.58	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Iron	22000	B	12	6.1	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Lead	16		0.29	0.13	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Magnesium	22000		5.8	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Manganese	310		0.58	0.085	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Nickel	40		0.58	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Potassium	3000		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Selenium	0.92		0.58	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Silver	2.1		0.29	0.075	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Sodium	190		58	8.6	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Thallium	1.4		0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1
Zinc	54		1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 18:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.54		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:57	1
Boron	0.16	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:57	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Date Collected: 11/26/19 10:08

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:57	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:57	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:57	1
Iron	0.21	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:57	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:57	1
Nickel	0.043		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:57	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:57	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:57	1
Zinc	0.029	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:57	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.16		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:42	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:28	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0099	J	0.020	0.0065	mg/Kg	☼	12/06/19 13:50	12/09/19 08:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 12:25	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8260B - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50
Carbon tetrachloride	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50
Chlorobenzene	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50
Chloroform	<0.10		0.10	0.050	mg/L			12/11/19 11:39	50
1,2-Dichloroethane	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50
1,1-Dichloroethene	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50
Methyl Ethyl Ketone	<0.25		0.25	0.13	mg/L			12/11/19 11:39	50
Tetrachloroethene	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50
Vinyl chloride	<0.050		0.050	0.025	mg/L			12/11/19 11:39	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		72 - 124		12/11/19 11:39	50
Dibromofluoromethane	102		75 - 120		12/11/19 11:39	50
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		12/11/19 11:39	50
Toluene-d8 (Surr)	100		75 - 120		12/11/19 11:39	50

Method: 8260B - TCLP Volatiles - TCLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	17		5.0	2.5	mg/L			12/11/19 02:40	5000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		72 - 124		12/11/19 02:40	5000
Dibromofluoromethane	94		75 - 120		12/11/19 02:40	5000
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		12/11/19 02:40	5000
Toluene-d8 (Surr)	105		75 - 120		12/11/19 02:40	5000

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,1,2,2-Tetrachloroethane	<5.2		5.2	2.1	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,1,2-Trichloroethane	<5.2		5.2	1.8	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,1-Dichloroethane	<5.2		5.2	2.1	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,1-Dichloroethene	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,2-Dichloroethane	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,2-Dichloropropane	<5.2		5.2	2.2	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
1,3-Dichloropropene, Total	<5.2		5.2	2.2	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
2-Butanone (MEK)	<26		26	11	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
2-Hexanone	<26		26	8.1	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
4-Methyl-2-pentanone (MIBK)	<26		26	11	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Acetone	<52		52	9.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Benzene	<1.3		1.3	0.76	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Bromodichloromethane	<5.2		5.2	1.9	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Bromoform	<5.2		5.2	2.5	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Bromomethane	<16		16	4.1	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Carbon disulfide	<10		10	4.2	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Carbon tetrachloride	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Chlorobenzene	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Chloroethane	<5.2		5.2	2.6	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Chloroform	<10		10	1.9	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Chloromethane	<5.2		5.2	1.7	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	36		5.2	2.1	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
cis-1,3-Dichloropropene	<5.2		5.2	2.2	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Dibromochloromethane	<5.2		5.2	2.5	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Ethylbenzene	<1.3		1.3	0.95	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Methyl tert-butyl ether	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Methylene Chloride	<26		26	8.4	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Styrene	<5.2		5.2	2.0	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Tetrachloroethene	<5.2		5.2	1.9	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Toluene	<1.3		1.3	0.76	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
trans-1,2-Dichloroethene	<5.2		5.2	1.8	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
trans-1,3-Dichloropropene	<5.2		5.2	1.9	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Vinyl acetate	<10		10	4.7	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Vinyl chloride	<5.2		5.2	1.4	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000
Xylenes, Total	<2.6		2.6	1.1	mg/Kg	☼	11/26/19 10:45	12/07/19 03:17	5000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126	11/26/19 10:45	12/07/19 03:17	5000
4-Bromofluorobenzene (Surr)	103		72 - 124	11/26/19 10:45	12/07/19 03:17	5000
Dibromofluoromethane	99		75 - 120	11/26/19 10:45	12/07/19 03:17	5000
Toluene-d8 (Surr)	103		75 - 120	11/26/19 10:45	12/07/19 03:17	5000

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	3400		26	8.5	mg/Kg	☼	11/26/19 10:45	12/09/19 18:13	50000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		75 - 126	11/26/19 10:45	12/09/19 18:13	50000
4-Bromofluorobenzene (Surr)	104		72 - 124	11/26/19 10:45	12/09/19 18:13	50000
Dibromofluoromethane	109		75 - 120	11/26/19 10:45	12/09/19 18:13	50000
Toluene-d8 (Surr)	100		75 - 120	11/26/19 10:45	12/09/19 18:13	50000

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Hexachlorocyclopentadiene	<0.80	*	0.80	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2-Methylnaphthalene	0.81		0.080	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Acenaphthene	0.96		0.040	0.0072	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Dibenzofuran	0.56		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Fluorene	0.51		0.040	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Phenanthrene	1.8		0.040	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Anthracene	0.17		0.040	0.0067	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Fluoranthene	0.45		0.040	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Pyrene	0.43		0.040	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Benzo[a]anthracene	0.11		0.040	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Chrysene	0.096		0.040	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Benzo[b]fluoranthene	0.072		0.040	0.0086	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Benzo[k]fluoranthene	0.056		0.040	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Benzo[a]pyrene	0.056		0.040	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	65		31 - 166	12/06/19 18:03	12/07/19 18:01	1
Phenol-d5	62		30 - 153	12/06/19 18:03	12/07/19 18:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		37 - 147	12/06/19 18:03	12/07/19 18:01	1
2-Fluorobiphenyl	86		43 - 145	12/06/19 18:03	12/07/19 18:01	1
2,4,6-Tribromophenol	43		31 - 143	12/06/19 18:03	12/07/19 18:01	1
Terphenyl-d14	89		42 - 157	12/06/19 18:03	12/07/19 18:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	4.4		0.20	0.031	mg/Kg	☒	12/06/19 18:03	12/10/19 02:50	5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cresol, o-	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 04:47	1
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 04:47	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/07/19 04:47	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		12/06/19 08:39	12/07/19 04:47	1
Hexachloro-1,3-butadiene	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/07/19 04:47	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/07/19 04:47	1
m & p - Cresol	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 04:47	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/07/19 04:47	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		12/06/19 08:39	12/07/19 04:47	1
Pyridine	<0.20		0.20	0.20	mg/L		12/06/19 08:39	12/07/19 04:47	1
2,4,5-Trichlorophenol	<0.10 *		0.10	0.10	mg/L		12/06/19 08:39	12/07/19 04:47	1
2,4,6-Trichlorophenol	<0.050 *		0.050	0.050	mg/L		12/06/19 08:39	12/07/19 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		34 - 110	12/06/19 08:39	12/07/19 04:47	1
2-Fluorophenol	61		27 - 110	12/06/19 08:39	12/07/19 04:47	1
Nitrobenzene-d5	79		36 - 120	12/06/19 08:39	12/07/19 04:47	1
Phenol-d5	38		20 - 100	12/06/19 08:39	12/07/19 04:47	1
Terphenyl-d14	120		40 - 145	12/06/19 08:39	12/07/19 04:47	1
2,4,6-Tribromophenol	91		40 - 145	12/06/19 08:39	12/07/19 04:47	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.010		0.010	0.0050	mg/L		12/09/19 13:27	12/10/19 12:47	1
Endrin	<0.0050		0.0050	0.0025	mg/L		12/09/19 13:27	12/10/19 12:47	1
gamma-BHC (Lindane)	<0.0050		0.0050	0.0025	mg/L		12/09/19 13:27	12/10/19 12:47	1
Heptachlor	<0.0040		0.0040	0.0020	mg/L		12/09/19 13:27	12/10/19 12:47	1
Heptachlor epoxide	<0.0040		0.0040	0.0020	mg/L		12/09/19 13:27	12/10/19 12:47	1
Methoxychlor	<0.010		0.010	0.0050	mg/L		12/09/19 13:27	12/10/19 12:47	1
Toxaphene	<0.050		0.050	0.025	mg/L		12/09/19 13:27	12/10/19 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	59		30 - 130	12/09/19 13:27	12/10/19 12:47	1
Tetrachloro-m-xylene	97		30 - 120	12/09/19 13:27	12/10/19 12:47	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.020		0.020	0.0070	mg/Kg	☒	12/09/19 16:08	12/10/19 09:58	1
PCB-1221	<0.020		0.020	0.0087	mg/Kg	☒	12/09/19 16:08	12/10/19 09:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	<0.020		0.020	0.0086	mg/Kg	☼	12/09/19 16:08	12/10/19 09:58	1
PCB-1242	<0.020		0.020	0.0065	mg/Kg	☼	12/09/19 16:08	12/10/19 09:58	1
PCB-1248	<0.020		0.020	0.0078	mg/Kg	☼	12/09/19 16:08	12/10/19 09:58	1
PCB-1254	<0.020		0.020	0.0043	mg/Kg	☼	12/09/19 16:08	12/10/19 09:58	1
PCB-1260	<0.020		0.020	0.0097	mg/Kg	☼	12/09/19 16:08	12/10/19 09:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	87		37 - 121				12/09/19 16:08	12/10/19 09:58	1
Tetrachloro-m-xylene	75		49 - 129				12/09/19 16:08	12/10/19 09:58	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 08:27	1
Silvex (2,4,5-TP)	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 08:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	75		25 - 130				12/10/19 11:27	12/11/19 08:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.1	0.22	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Arsenic	7.1		0.56	0.19	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Barium	36		0.56	0.064	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Beryllium	0.75		0.22	0.052	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Boron	15		2.8	0.26	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Cadmium	0.16	B	0.11	0.020	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Calcium	29000		11	1.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Chromium	17	B	0.56	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Cobalt	15		0.28	0.073	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Copper	33		0.56	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Iron	19000	B	11	5.8	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Lead	18		0.28	0.13	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Magnesium	19000		5.6	2.8	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Manganese	280		0.56	0.081	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Nickel	42		0.56	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Potassium	2900		28	9.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Selenium	0.69		0.56	0.33	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Silver	2.4		0.28	0.072	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Sodium	610		56	8.3	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Thallium	1.2		0.56	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Vanadium	19		0.28	0.066	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1
Zinc	100		1.1	0.49	mg/Kg	☼	12/05/19 18:06	12/06/19 18:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		12/05/19 15:44	12/07/19 04:01	1
Barium	0.59		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:01	1
Boron	0.069	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:01	1
Cadmium	0.0025	J	0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:01	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.013	J	0.025	0.010	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Iron	0.23	J ^	0.40	0.20	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Manganese	2.4		0.025	0.010	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Nickel	0.018	J	0.025	0.010	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Silver	<0.025		0.025	0.010	mg/L	-	12/05/19 15:44	12/07/19 04:01	1
Zinc	<0.50		0.50	0.020	mg/L	-	12/05/19 15:44	12/07/19 04:01	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.30		0.025	0.010	mg/L	-	12/06/19 15:37	12/10/19 04:46	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/05/19 15:44	12/09/19 15:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/05/19 15:44	12/09/19 15:39	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/06/19 09:20	12/09/19 10:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.019	0.0062	mg/Kg	☼	12/06/19 13:50	12/09/19 08:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		99.0	99.0	Degrees F	-		12/10/19 13:42	1
Sulfide, Reactive	<50		50	3.9	mg/Kg	-	12/05/19 17:51	12/06/19 00:39	1
Cyanide, Reactive	<0.46		0.46	0.46	mg/Kg	-	12/06/19 10:45	12/06/19 13:25	1
pH	8.1		0.2	0.2	SU	-		12/03/19 12:29	1
Paint Filter	Pass				No Unit	-		12/09/19 15:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Acetone	0.025		0.017	0.0073	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	11/27/19 17:40	12/06/19 16:16	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/27/19 17:40	12/06/19 16:16	1
Dibromofluoromethane	87		75 - 126	11/27/19 17:40	12/06/19 16:16	1
Toluene-d8 (Surr)	96		75 - 124	11/27/19 17:40	12/06/19 16:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Naphthalene	0.49		0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Hexachlorocyclopentadiene	<0.84 *		0.84	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2-Methylnaphthalene	0.22		0.084	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Acenaphthene	0.46		0.041	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Dibenzofuran	0.26		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Fluorene	0.34		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Phenanthrene	0.89		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Anthracene	0.069		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Fluoranthene	0.20		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Pyrene	0.21		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Benzo[a]anthracene	0.054		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.058		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				12/06/19 18:03	12/07/19 18:29	1
Phenol-d5	64		30 - 153				12/06/19 18:03	12/07/19 18:29	1
Nitrobenzene-d5	75		37 - 147				12/06/19 18:03	12/07/19 18:29	1
2-Fluorobiphenyl	86		43 - 145				12/06/19 18:03	12/07/19 18:29	1
2,4,6-Tribromophenol	53		31 - 143				12/06/19 18:03	12/07/19 18:29	1
Terphenyl-d14	100		42 - 157				12/06/19 18:03	12/07/19 18:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.71	J	1.1	0.22	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Arsenic	6.6		0.57	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Barium	39		0.57	0.065	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Beryllium	0.73		0.23	0.054	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Boron	16		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Cadmium	0.15	B	0.11	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Calcium	57000		110	19	mg/Kg	☼	12/05/19 18:06	12/09/19 10:59	10
Chromium	17	B	0.57	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Cobalt	14		0.29	0.075	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Copper	25		0.57	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Iron	19000	B	11	6.0	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Lead	14		0.29	0.13	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Magnesium	24000		5.7	2.8	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Manganese	330		0.57	0.083	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Nickel	36		0.57	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Potassium	2900		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Selenium	0.69		0.57	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Silver	2.1		0.29	0.074	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Sodium	190		57	8.5	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Thallium	0.94		0.57	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1
Zinc	55		1.1	0.50	mg/Kg	☼	12/05/19 18:06	12/06/19 18:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.72		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:05	1
Boron	0.078	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:05	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:05	1
Cobalt	0.026		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:05	1
Iron	0.23	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:05	1
Manganese	2.0		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:05	1
Nickel	0.11		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:05	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:05	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:05	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:05	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.042		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:50	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	0.0067	mg/Kg	☼	12/06/19 13:50	12/09/19 08:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			12/03/19 12:37	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (12-18)

Lab Sample ID: 500-174194-9

Date Collected: 11/26/19 11:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Acetone	0.0079	J	0.016	0.0071	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/27/19 17:40	12/06/19 16:41	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/27/19 17:40	12/06/19 16:41	1
Dibromofluoromethane	88		75 - 126	11/27/19 17:40	12/06/19 16:41	1
Toluene-d8 (Surr)	97		75 - 124	11/27/19 17:40	12/06/19 16:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (12-18)

Lab Sample ID: 500-174194-9

Date Collected: 11/26/19 11:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Phenanthrene	0.059		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Benzof[anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (12-18)

Lab Sample ID: 500-174194-9

Date Collected: 11/26/19 11:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		31 - 166				12/06/19 18:03	12/07/19 15:17	1
Phenol-d5	65		30 - 153				12/06/19 18:03	12/07/19 15:17	1
Nitrobenzene-d5	71		37 - 147				12/06/19 18:03	12/07/19 15:17	1
2-Fluorobiphenyl	82		43 - 145				12/06/19 18:03	12/07/19 15:17	1
2,4,6-Tribromophenol	45		31 - 143				12/06/19 18:03	12/07/19 15:17	1
Terphenyl-d14	95		42 - 157				12/06/19 18:03	12/07/19 15:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.77	J	1.2	0.22	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Arsenic	7.8		0.58	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Barium	39		0.58	0.066	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Beryllium	0.69		0.23	0.054	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Boron	16		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Cadmium	0.095	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Calcium	56000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:03	10
Chromium	17	B	0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Copper	30		0.58	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Iron	20000	B	12	6.0	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Lead	15		0.29	0.13	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Magnesium	23000		5.8	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Manganese	320		0.58	0.084	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Nickel	39		0.58	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Potassium	2800		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Selenium	0.68		0.58	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Silver	2.0		0.29	0.074	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Sodium	180		58	8.5	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1
Zinc	55		1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 18:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:09	1
Boron	0.10	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (12-18)

Lab Sample ID: 500-174194-9

Date Collected: 11/26/19 11:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:09	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:09	1
Cobalt	0.018	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:09	1
Iron	0.39	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:09	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:09	1
Nickel	0.057		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:09	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:09	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:09	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:46	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.018		0.018	0.0061	mg/Kg	☼	12/06/19 13:50	12/09/19 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/03/19 12:41	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (18-24)

Lab Sample ID: 500-174194-10

Date Collected: 11/26/19 11:15

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Acetone	0.029		0.019	0.0083	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	11/27/19 17:40	12/06/19 17:07	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/27/19 17:40	12/06/19 17:07	1
Dibromofluoromethane	87		75 - 126	11/27/19 17:40	12/06/19 17:07	1
Toluene-d8 (Surr)	97		75 - 124	11/27/19 17:40	12/06/19 17:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (18-24)

Lab Sample ID: 500-174194-10

Date Collected: 11/26/19 11:15

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Hexachlorocyclopentadiene	<0.84 *		0.84	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Phenanthrene	0.079		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (18-24)

Lab Sample ID: 500-174194-10

Date Collected: 11/26/19 11:15

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 15:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				12/06/19 18:03	12/07/19 15:44	1
Phenol-d5	65		30 - 153				12/06/19 18:03	12/07/19 15:44	1
Nitrobenzene-d5	76		37 - 147				12/06/19 18:03	12/07/19 15:44	1
2-Fluorobiphenyl	93		43 - 145				12/06/19 18:03	12/07/19 15:44	1
2,4,6-Tribromophenol	45		31 - 143				12/06/19 18:03	12/07/19 15:44	1
Terphenyl-d14	94		42 - 157				12/06/19 18:03	12/07/19 15:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Arsenic	7.5		0.60	0.21	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Barium	41		0.60	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Beryllium	0.68		0.24	0.056	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Boron	16		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Cadmium	0.096	J B	0.12	0.022	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Calcium	59000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:07	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Copper	25		0.60	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Iron	20000	B	12	6.3	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Lead	15		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Magnesium	25000		6.0	3.0	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Manganese	330		0.60	0.087	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Nickel	35		0.60	0.18	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Potassium	2800		30	11	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Selenium	0.98		0.60	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Silver	2.1		0.30	0.078	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Sodium	180		60	8.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Thallium	1.0		0.60	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Vanadium	19		0.30	0.071	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1
Zinc	58		1.2	0.53	mg/Kg	☼	12/05/19 18:06	12/06/19 18:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:14	1
Boron	0.11	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:14	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (18-24)

Lab Sample ID: 500-174194-10

Date Collected: 11/26/19 11:15

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:14	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:14	1
Cobalt	0.019	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:14	1
Iron	0.22	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:14	1
Manganese	1.7		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:14	1
Nickel	0.055		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:14	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:14	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:14	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:14	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.038		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.019		0.019	0.0065	mg/Kg	☼	12/06/19 13:50	12/09/19 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/03/19 12:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,1-Dichloroethane	<0.0024		0.0024	0.00084	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,1-Dichloroethene	<0.0024		0.0024	0.00084	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,2-Dichloroethane	<0.0061		0.0061	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,2-Dichloropropane	<0.0024		0.0024	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00086	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
2-Butanone (MEK)	<0.0061		0.0061	0.0027	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
2-Hexanone	<0.0061		0.0061	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
4-Methyl-2-pentanone (MIBK)	<0.0061		0.0061	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Acetone	<0.024		0.024	0.011	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Benzene	<0.0024		0.0024	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Bromodichloromethane	<0.0024		0.0024	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Bromoform	<0.0024		0.0024	0.00071	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Bromomethane	<0.0061		0.0061	0.0023	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Carbon disulfide	<0.0061		0.0061	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Carbon tetrachloride	<0.0024		0.0024	0.00071	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Chlorobenzene	<0.0024		0.0024	0.00090	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Chloroethane	<0.0061		0.0061	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Chloroform	<0.0024		0.0024	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Chloromethane	<0.0061		0.0061	0.0025	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Dibromochloromethane	<0.0024		0.0024	0.00080	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Ethylbenzene	<0.0024		0.0024	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00072	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Methylene Chloride	<0.0061		0.0061	0.0024	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Styrene	<0.0024		0.0024	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Tetrachloroethene	<0.0024		0.0024	0.00083	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Toluene	<0.0024		0.0024	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00086	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Trichloroethene	0.00086	J	0.0024	0.00083	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Vinyl acetate	<0.0061		0.0061	0.0021	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1
Xylenes, Total	<0.0049		0.0049	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	11/27/19 17:40	12/06/19 17:33	1
4-Bromofluorobenzene (Surr)	101		75 - 131	11/27/19 17:40	12/06/19 17:33	1
Dibromofluoromethane	91		75 - 126	11/27/19 17:40	12/06/19 17:33	1
Toluene-d8 (Surr)	93		75 - 124	11/27/19 17:40	12/06/19 17:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Hexachlorocyclopentadiene	<0.84 *		0.84	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Phenanthrene	0.075		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166	12/06/19 18:03	12/07/19 16:11	1
Phenol-d5	70		30 - 153	12/06/19 18:03	12/07/19 16:11	1
Nitrobenzene-d5	81		37 - 147	12/06/19 18:03	12/07/19 16:11	1
2-Fluorobiphenyl	95		43 - 145	12/06/19 18:03	12/07/19 16:11	1
2,4,6-Tribromophenol	49		31 - 143	12/06/19 18:03	12/07/19 16:11	1
Terphenyl-d14	104		42 - 157	12/06/19 18:03	12/07/19 16:11	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.94	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Arsenic	7.6		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Barium	41		0.59	0.067	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Beryllium	0.76		0.23	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Boron	18		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Cadmium	0.12	B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Calcium	58000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:11	10
Chromium	17	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Cobalt	14		0.29	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Copper	27		0.59	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Iron	19000	B	12	6.1	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Lead	14		0.29	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Magnesium	24000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Manganese	320		0.59	0.085	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Nickel	37		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Potassium	3000		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Selenium	0.93		0.59	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Silver	2.3		0.29	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Sodium	190		59	8.7	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1
Zinc	61		1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 18:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:18	1
Boron	0.13	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:18	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:18	1
Cobalt	0.018	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:18	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:44	12/09/19 13:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:18	1
Manganese	1.6		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:18	1
Nickel	0.054		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:18	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:18	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:18	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:18	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.18		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.019	0.0064	mg/Kg	☼	12/09/19 15:35	12/10/19 09:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/03/19 12:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	11/27/19 17:40	12/06/19 17:58	1
4-Bromofluorobenzene (Surr)	113		75 - 131	11/27/19 17:40	12/06/19 17:58	1
Dibromofluoromethane	93		75 - 126	11/27/19 17:40	12/06/19 17:58	1
Toluene-d8 (Surr)	97		75 - 124	11/27/19 17:40	12/06/19 17:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Hexachlorocyclopentadiene	<0.82	*	0.82	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Fluorene	0.0066	J	0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 19:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	76		31 - 166				12/06/19 18:03	12/07/19 19:54	1
Phenol-d5	82		30 - 153				12/06/19 18:03	12/07/19 19:54	1
Nitrobenzene-d5	94		37 - 147				12/06/19 18:03	12/07/19 19:54	1
2-Fluorobiphenyl	88		43 - 145				12/06/19 18:03	12/07/19 19:54	1
2,4,6-Tribromophenol	69		31 - 143				12/06/19 18:03	12/07/19 19:54	1
Terphenyl-d14	121		42 - 157				12/06/19 18:03	12/07/19 19:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.84	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Arsenic	6.2		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Barium	35		0.59	0.067	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Beryllium	0.65		0.24	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Boron	13		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Cadmium	0.11	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Calcium	150000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:15	10
Chromium	14	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Cobalt	14		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Copper	26		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Iron	15000	B	12	6.1	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Lead	14		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Magnesium	15000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Manganese	280		0.59	0.086	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Potassium	2600		30	10	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Selenium	0.51	J	0.59	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Silver	1.6		0.30	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Sodium	1200		59	8.7	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Thallium	1.3		0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Vanadium	16		0.30	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1
Zinc	45		1.2	0.52	mg/Kg	☼	12/05/19 18:06	12/06/19 19:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:22	1
Boron	0.073	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:22	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:22	1
Cobalt	0.088		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:22	1
Iron	0.23	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:22	1
Manganese	2.5		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:22	1
Nickel	0.16		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:22	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:22	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:22	1
Zinc	0.068	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:22	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.80		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:15	1
Nickel	0.19		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:56	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0076	J	0.018	0.0061	mg/Kg	☼	12/06/19 13:50	12/09/19 09:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 12:53	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Date Collected: 11/26/19 12:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Acetone	0.036		0.017	0.0076	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Bromomethane	<0.0044		0.0044	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/27/19 17:40	12/06/19 18:24	1
4-Bromofluorobenzene (Surr)	105		75 - 131	11/27/19 17:40	12/06/19 18:24	1
Dibromofluoromethane	91		75 - 126	11/27/19 17:40	12/06/19 18:24	1
Toluene-d8 (Surr)	97		75 - 124	11/27/19 17:40	12/06/19 18:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Date Collected: 11/26/19 12:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Hexachlorocyclopentadiene	<0.84 *		0.84	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Phenanthrene	0.068		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Date Collected: 11/26/19 12:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	61		31 - 166				12/06/19 18:03	12/07/19 13:26	1
Phenol-d5	58		30 - 153				12/06/19 18:03	12/07/19 13:26	1
Nitrobenzene-d5	62		37 - 147				12/06/19 18:03	12/07/19 13:26	1
2-Fluorobiphenyl	74		43 - 145				12/06/19 18:03	12/07/19 13:26	1
2,4,6-Tribromophenol	46		31 - 143				12/06/19 18:03	12/07/19 13:26	1
Terphenyl-d14	100		42 - 157				12/06/19 18:03	12/07/19 13:26	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.78	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Arsenic	5.9		0.60	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Barium	42		0.60	0.068	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Beryllium	0.85		0.24	0.056	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Boron	17		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Cadmium	0.080	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Calcium	26000		12	2.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Chromium	20	B	0.60	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Cobalt	15		0.30	0.078	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Copper	29		0.60	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Iron	19000	B	12	6.2	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Lead	15		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Magnesium	17000		6.0	3.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Manganese	270		0.60	0.086	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Nickel	42		0.60	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Potassium	3400		30	11	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Selenium	0.92		0.60	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Silver	2.4		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Sodium	1000		60	8.8	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Thallium	1.4		0.60	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Vanadium	21		0.30	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1
Zinc	59		1.2	0.52	mg/Kg	☼	12/05/19 18:06	12/06/19 19:05	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:26	1
Boron	0.15	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Date Collected: 11/26/19 12:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:26	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:26	1
Cobalt	0.048		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:26	1
Iron	0.22	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:26	1
Manganese	2.5		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:26	1
Nickel	0.099		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:26	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:26	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:26	1
Zinc	0.066	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:26	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.062		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:19	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	0.0066	mg/Kg	☼	12/06/19 13:50	12/09/19 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/03/19 12:57	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Acetone	0.026		0.017	0.0075	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/27/19 17:40	12/06/19 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/27/19 17:40	12/06/19 18:49	1
4-Bromofluorobenzene (Surr)	99		75 - 131	11/27/19 17:40	12/06/19 18:49	1
Dibromofluoromethane	94		75 - 126	11/27/19 17:40	12/06/19 18:49	1
Toluene-d8 (Surr)	95		75 - 124	11/27/19 17:40	12/06/19 18:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Hexachlorocyclopentadiene	<0.82 *		0.82	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Phenanthrene	0.064		0.040	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		31 - 166				12/06/19 18:03	12/07/19 13:54	1
Phenol-d5	63		30 - 153				12/06/19 18:03	12/07/19 13:54	1
Nitrobenzene-d5	72		37 - 147				12/06/19 18:03	12/07/19 13:54	1
2-Fluorobiphenyl	85		43 - 145				12/06/19 18:03	12/07/19 13:54	1
2,4,6-Tribromophenol	47		31 - 143				12/06/19 18:03	12/07/19 13:54	1
Terphenyl-d14	98		42 - 157				12/06/19 18:03	12/07/19 13:54	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.93	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Arsenic	7.3		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Barium	39		0.59	0.067	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Beryllium	0.67		0.24	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Boron	17		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Cadmium	0.20	B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Calcium	57000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:19	10
Chromium	17	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Cobalt	14		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Copper	27		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Iron	20000	B	12	6.1	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Lead	14		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Manganese	330		0.59	0.086	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Nickel	37		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Potassium	3100		30	10	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Selenium	0.66		0.59	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Silver	2.5		0.30	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Sodium	180		59	8.7	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Thallium	1.1		0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Vanadium	20		0.30	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1
Zinc	76		1.2	0.52	mg/Kg	☼	12/05/19 18:06	12/06/19 19:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:31	1
Boron	0.099	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:31	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:31	1
Cobalt	0.019	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:31	1
Iron	0.21	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:31	1
Lead	0.0093		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:31	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:31	1
Nickel	0.054		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:31	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:31	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:31	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:31	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:37	12/10/19 05:23	1
Manganese	0.023	J	0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:23	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:10	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.019	0.0063	mg/Kg	☼	12/09/19 15:35	12/10/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 13:01	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Date Collected: 11/26/19 12:22

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Acetone	<0.019		0.019	0.0084	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/27/19 17:40	12/06/19 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	11/27/19 17:40	12/06/19 19:15	1
4-Bromofluorobenzene (Surr)	103		75 - 131	11/27/19 17:40	12/06/19 19:15	1
Dibromofluoromethane	88		75 - 126	11/27/19 17:40	12/06/19 19:15	1
Toluene-d8 (Surr)	96		75 - 124	11/27/19 17:40	12/06/19 19:15	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Date Collected: 11/26/19 12:22

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Hexachlorocyclopentadiene	<0.84 *		0.84	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Phenanthrene	0.090		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Date Collected: 11/26/19 12:22

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				12/06/19 18:03	12/07/19 14:21	1
Phenol-d5	66		30 - 153				12/06/19 18:03	12/07/19 14:21	1
Nitrobenzene-d5	76		37 - 147				12/06/19 18:03	12/07/19 14:21	1
2-Fluorobiphenyl	92		43 - 145				12/06/19 18:03	12/07/19 14:21	1
2,4,6-Tribromophenol	47		31 - 143				12/06/19 18:03	12/07/19 14:21	1
Terphenyl-d14	101		42 - 157				12/06/19 18:03	12/07/19 14:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.85	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Arsenic	7.4		0.60	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Barium	42		0.60	0.068	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Beryllium	0.75		0.24	0.056	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Boron	18		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Cadmium	0.087	J B	0.12	0.022	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Calcium	56000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:23	10
Chromium	17	B	0.60	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Copper	29		0.60	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Iron	19000	B	12	6.2	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Lead	14		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Magnesium	23000		6.0	3.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Manganese	310		0.60	0.087	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Nickel	37		0.60	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Potassium	3100		30	11	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Selenium	0.87		0.60	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Silver	2.4		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Sodium	200		60	8.9	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Thallium	0.90		0.60	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1
Zinc	53		1.2	0.53	mg/Kg	☼	12/05/19 18:06	12/06/19 19:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 05:38	1
Boron	0.15	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Date Collected: 11/26/19 12:22

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0021	J	0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 05:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:38	1
Cobalt	0.042		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:38	1
Iron	0.33	J B	0.40	0.20	mg/L		12/05/19 15:44	12/09/19 13:30	1
Lead	0.017		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 05:38	1
Manganese	3.9		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:38	1
Nickel	0.075		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 05:38	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:38	1
Zinc	0.049	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 05:38	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:37	12/10/19 05:27	1
Manganese	0.048		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:27	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 18:11	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 18:11	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/19 16:30	12/06/19 09:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.019	0.0064	mg/Kg	☼	12/09/19 15:35	12/10/19 09:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 13:05	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Date Collected: 11/26/19 12:27

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00078	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00074	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.0010	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,1-Dichloroethane	<0.0023		0.0023	0.00080	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,1-Dichloroethene	<0.0023		0.0023	0.00080	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,2-Dichloroethane	<0.0058		0.0058	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,2-Dichloropropane	<0.0023		0.0023	0.00060	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
2-Butanone (MEK)	<0.0058		0.0058	0.0026	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
2-Hexanone	<0.0058		0.0058	0.0018	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
4-Methyl-2-pentanone (MIBK)	<0.0058		0.0058	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Acetone	0.017	J	0.023	0.010	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Benzene	<0.0023		0.0023	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Bromodichloromethane	<0.0023		0.0023	0.00047	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Bromoform	<0.0023		0.0023	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Bromomethane	<0.0058		0.0058	0.0022	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Carbon disulfide	<0.0058		0.0058	0.0012	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Carbon tetrachloride	<0.0023		0.0023	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Chlorobenzene	<0.0023		0.0023	0.00086	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Chloroethane	<0.0058		0.0058	0.0017	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Chloroform	<0.0023		0.0023	0.00081	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Chloromethane	<0.0058		0.0058	0.0023	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00065	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00070	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Dibromochloromethane	<0.0023		0.0023	0.00076	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00068	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Methylene Chloride	<0.0058		0.0058	0.0023	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Styrene	<0.0023		0.0023	0.00070	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Tetrachloroethene	<0.0023		0.0023	0.00079	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Toluene	<0.0023		0.0023	0.00059	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00082	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Trichloroethene	<0.0023		0.0023	0.00079	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Vinyl acetate	<0.0058		0.0058	0.0020	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1
Xylenes, Total	<0.0047		0.0047	0.00075	mg/Kg	☼	11/27/19 17:40	12/06/19 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	11/27/19 17:40	12/06/19 15:50	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/27/19 17:40	12/06/19 15:50	1
Dibromofluoromethane	88		75 - 126	11/27/19 17:40	12/06/19 15:50	1
Toluene-d8 (Surr)	97		75 - 124	11/27/19 17:40	12/06/19 15:50	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Date Collected: 11/26/19 12:27

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Phenanthrene	0.057		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Date Collected: 11/26/19 12:27

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		31 - 166				12/06/19 18:03	12/07/19 14:49	1
Phenol-d5	64		30 - 153				12/06/19 18:03	12/07/19 14:49	1
Nitrobenzene-d5	72		37 - 147				12/06/19 18:03	12/07/19 14:49	1
2-Fluorobiphenyl	89		43 - 145				12/06/19 18:03	12/07/19 14:49	1
2,4,6-Tribromophenol	37		31 - 143				12/06/19 18:03	12/07/19 14:49	1
Terphenyl-d14	98		42 - 157				12/06/19 18:03	12/07/19 14:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.78	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Arsenic	8.0		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Barium	42		0.59	0.067	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Beryllium	0.73		0.23	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Boron	19		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Cadmium	0.098	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Calcium	53000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:27	10
Chromium	18	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Cobalt	15		0.29	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Copper	28		0.59	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Iron	20000	B	12	6.1	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Lead	15		0.29	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Manganese	310		0.59	0.085	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Nickel	39		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Potassium	3200		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Selenium	0.66		0.59	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Silver	2.2		0.29	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Sodium	200		59	8.7	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Thallium	1.2		0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Vanadium	21		0.29	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1
Zinc	54		1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 19:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.65		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:47	1
Boron	0.17	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Date Collected: 11/26/19 12:27

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:47	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:47	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:47	1
Iron	0.36	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:47	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:47	1
Nickel	0.049		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:47	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:47	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:47	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.062		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:31	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:13	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.019	0.0063	mg/Kg	☼	12/09/19 15:35	12/10/19 09:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/03/19 13:09	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8260B - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
Carbon tetrachloride	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
Chlorobenzene	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
Chloroform	<0.10		0.10	0.050	mg/L			12/12/19 17:41	50
1,2-Dichloroethane	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
1,1-Dichloroethene	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
Methyl Ethyl Ketone	<0.25		0.25	0.13	mg/L			12/12/19 17:41	50
Tetrachloroethene	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
Vinyl chloride	<0.050		0.050	0.025	mg/L			12/12/19 17:41	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		72 - 124					12/12/19 17:41	50
Dibromofluoromethane	105		75 - 120					12/12/19 17:41	50
1,2-Dichloroethane-d4 (Surr)	112		75 - 126					12/12/19 17:41	50
Toluene-d8 (Surr)	101		75 - 120					12/12/19 17:41	50

Method: 8260B - TCLP Volatiles - TCLP - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	14		0.50	0.25	mg/L			12/12/19 18:05	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		72 - 124					12/12/19 18:05	500
Dibromofluoromethane	106		75 - 120					12/12/19 18:05	500
1,2-Dichloroethane-d4 (Surr)	110		75 - 126					12/12/19 18:05	500
Toluene-d8 (Surr)	101		75 - 120					12/12/19 18:05	500

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<5.6		5.6	2.1	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,1,2,2-Tetrachloroethane	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,1,2-Trichloroethane	<5.6		5.6	2.0	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,1-Dichloroethane	<5.6		5.6	2.3	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,1-Dichloroethene	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,2-Dichloroethane	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,2-Dichloropropane	<5.6		5.6	2.4	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
1,3-Dichloropropene, Total	<5.6		5.6	2.3	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
2-Butanone (MEK)	<28		28	12	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
2-Hexanone	<28		28	8.7	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
4-Methyl-2-pentanone (MIBK)	<28		28	12	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Acetone	<56		56	9.7	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Benzene	<1.4		1.4	0.82	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Bromodichloromethane	<5.6		5.6	2.1	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Bromoform	<5.6		5.6	2.7	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Bromomethane	<17		17	4.5	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Carbon disulfide	<11		11	4.5	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Carbon tetrachloride	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Chlorobenzene	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Chloroethane	<5.6		5.6	2.8	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Chloroform	<11		11	2.1	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Chloromethane	<5.6		5.6	1.8	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	34		5.6	2.3	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
cis-1,3-Dichloropropene	<5.6		5.6	2.3	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Dibromochloromethane	<5.6		5.6	2.7	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Ethylbenzene	<1.4		1.4	1.0	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Methyl tert-butyl ether	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Methylene Chloride	<28		28	9.1	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Styrene	<5.6		5.6	2.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Tetrachloroethene	<5.6		5.6	2.1	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Toluene	<1.4		1.4	0.82	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
trans-1,2-Dichloroethene	<5.6		5.6	2.0	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
trans-1,3-Dichloropropene	<5.6		5.6	2.0	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Vinyl acetate	<11		11	5.1	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Vinyl chloride	<5.6		5.6	1.5	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000
Xylenes, Total	<2.8		2.8	1.2	mg/Kg	☼	11/26/19 13:12	12/07/19 03:42	5000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126	11/26/19 13:12	12/07/19 03:42	5000
4-Bromofluorobenzene (Surr)	103		72 - 124	11/26/19 13:12	12/07/19 03:42	5000
Dibromofluoromethane	98		75 - 120	11/26/19 13:12	12/07/19 03:42	5000
Toluene-d8 (Surr)	100		75 - 120	11/26/19 13:12	12/07/19 03:42	5000

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	2400		28	9.2	mg/Kg	☼	11/26/19 13:12	12/09/19 18:40	50000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		75 - 126	11/26/19 13:12	12/09/19 18:40	50000
4-Bromofluorobenzene (Surr)	105		72 - 124	11/26/19 13:12	12/09/19 18:40	50000
Dibromofluoromethane	107		75 - 120	11/26/19 13:12	12/09/19 18:40	50000
Toluene-d8 (Surr)	103		75 - 120	11/26/19 13:12	12/09/19 18:40	50000

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2-Methylnaphthalene	0.050	J	0.083	0.0075	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Phenanthrene	0.17		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Fluoranthene	0.063		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Pyrene	0.063		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Benzo[a]anthracene	0.021	J	0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Chrysene	0.035	J	0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/10/19 04:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		31 - 166	12/06/19 18:03	12/10/19 04:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5	95		30 - 153	12/06/19 18:03	12/10/19 04:11	1
Nitrobenzene-d5	81		37 - 147	12/06/19 18:03	12/10/19 04:11	1
2-Fluorobiphenyl	83		43 - 145	12/06/19 18:03	12/10/19 04:11	1
2,4,6-Tribromophenol	53		31 - 143	12/06/19 18:03	12/10/19 04:11	1
Terphenyl-d14	94		42 - 157	12/06/19 18:03	12/10/19 04:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cresol, o-	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 05:16	1
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 05:16	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/07/19 05:16	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		12/06/19 08:39	12/07/19 05:16	1
Hexachloro-1,3-butadiene	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/07/19 05:16	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/07/19 05:16	1
m & p - Cresol	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 05:16	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/07/19 05:16	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		12/06/19 08:39	12/07/19 05:16	1
Pyridine	<0.20		0.20	0.20	mg/L		12/06/19 08:39	12/07/19 05:16	1
2,4,5-Trichlorophenol	<0.10	*	0.10	0.10	mg/L		12/06/19 08:39	12/07/19 05:16	1
2,4,6-Trichlorophenol	<0.050	*	0.050	0.050	mg/L		12/06/19 08:39	12/07/19 05:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	74		34 - 110	12/06/19 08:39	12/07/19 05:16	1
2-Fluorophenol	54		27 - 110	12/06/19 08:39	12/07/19 05:16	1
Nitrobenzene-d5	64		36 - 120	12/06/19 08:39	12/07/19 05:16	1
Phenol-d5	33		20 - 100	12/06/19 08:39	12/07/19 05:16	1
Terphenyl-d14	102		40 - 145	12/06/19 08:39	12/07/19 05:16	1
2,4,6-Tribromophenol	65		40 - 145	12/06/19 08:39	12/07/19 05:16	1

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.010		0.010	0.0050	mg/L		12/09/19 13:27	12/10/19 13:08	1
Endrin	<0.0050		0.0050	0.0025	mg/L		12/09/19 13:27	12/10/19 13:08	1
gamma-BHC (Lindane)	<0.0050		0.0050	0.0025	mg/L		12/09/19 13:27	12/10/19 13:08	1
Heptachlor	<0.0040		0.0040	0.0020	mg/L		12/09/19 13:27	12/10/19 13:08	1
Heptachlor epoxide	<0.0040		0.0040	0.0020	mg/L		12/09/19 13:27	12/10/19 13:08	1
Methoxychlor	<0.010		0.010	0.0050	mg/L		12/09/19 13:27	12/10/19 13:08	1
Toxaphene	<0.050		0.050	0.025	mg/L		12/09/19 13:27	12/10/19 13:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	91		30 - 130	12/09/19 13:27	12/10/19 13:08	1
Tetrachloro-m-xylene	98		30 - 120	12/09/19 13:27	12/10/19 13:08	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.021		0.021	0.0073	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1
PCB-1221	<0.021		0.021	0.0091	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1
PCB-1232	<0.021		0.021	0.0090	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1
PCB-1242	<0.021		0.021	0.0068	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1
PCB-1248	<0.021		0.021	0.0081	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	<0.021		0.021	0.0045	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1
PCB-1260	<0.021		0.021	0.010	mg/Kg	☼	12/09/19 16:08	12/10/19 10:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	99		37 - 121				12/09/19 16:08	12/10/19 10:13	1
Tetrachloro-m-xylene	84		49 - 129				12/09/19 16:08	12/10/19 10:13	1

Method: 8151 - TCLP Herbicides - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 08:47	1
Silvex (2,4,5-TP)	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 08:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	82		25 - 130				12/10/19 11:27	12/11/19 08:47	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.78	J	1.2	0.24	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Arsenic	8.7		0.61	0.21	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Barium	32		0.61	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Beryllium	0.77		0.25	0.057	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Boron	16		3.1	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Cadmium	0.20	B	0.12	0.022	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Calcium	28000		12	2.1	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Chromium	17	B	0.61	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Cobalt	15		0.31	0.080	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Copper	32		0.61	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Iron	21000	B	12	6.4	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Lead	16		0.31	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Magnesium	19000		6.1	3.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Manganese	260		0.61	0.089	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Nickel	42		0.61	0.18	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Potassium	3100		31	11	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Selenium	0.40	J	0.61	0.36	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Silver	2.3		0.31	0.079	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Sodium	530		61	9.1	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Thallium	1.2		0.61	0.31	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Vanadium	19		0.31	0.072	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1
Zinc	56		1.2	0.54	mg/Kg	☼	12/05/19 18:06	12/06/19 19:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		12/05/19 15:44	12/07/19 04:51	1
Barium	0.53		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:51	1
Boron	0.092	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:51	1
Cadmium	0.0023	J	0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:51	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:51	1
Cobalt	0.043		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:51	1
Iron	0.34	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.2		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:51	1
Nickel	0.088		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:51	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:51	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:51	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:51	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.062		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:35	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:17	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.020	0.0067	mg/Kg	☼	12/09/19 15:35	12/10/19 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		99.0	99.0	Degrees F			12/10/19 15:03	1
Sulfide, Reactive	<48		48	3.8	mg/Kg		12/05/19 17:51	12/06/19 00:45	1
Cyanide, Reactive	<0.48		0.48	0.48	mg/Kg		12/06/19 10:45	12/06/19 13:25	1
pH	7.8		0.2	0.2	SU			12/03/19 13:13	1
Paint Filter	Pass				No Unit			12/09/19 15:47	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (6-12)

Lab Sample ID: 500-174194-18

Date Collected: 11/26/19 13:23

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Acetone	0.015	J	0.019	0.0083	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Trichloroethene	0.0012	J	0.0019	0.00064	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Vinyl acetate	<0.0047		0.0047	0.0017	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/27/19 17:40	12/07/19 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	11/27/19 17:40	12/07/19 01:51	1
4-Bromofluorobenzene (Surr)	108		75 - 131	11/27/19 17:40	12/07/19 01:51	1
Dibromofluoromethane	99		75 - 126	11/27/19 17:40	12/07/19 01:51	1
Toluene-d8 (Surr)	100		75 - 124	11/27/19 17:40	12/07/19 01:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (6-12)

Lab Sample ID: 500-174194-18

Date Collected: 11/26/19 13:23

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Hexachlorocyclopentadiene	<0.80	*	0.80	0.23	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,4-Dinitrophenol	<0.80		0.80	0.69	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Hexachlorobenzene	<0.080		0.080	0.0091	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Phenanthrene	0.090		0.039	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Benzof[anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (6-12)

Lab Sample ID: 500-174194-18

Date Collected: 11/26/19 13:23

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	72		31 - 166				12/06/19 18:03	12/07/19 18:42	1
Phenol-d5	80		30 - 153				12/06/19 18:03	12/07/19 18:42	1
Nitrobenzene-d5	101		37 - 147				12/06/19 18:03	12/07/19 18:42	1
2-Fluorobiphenyl	93		43 - 145				12/06/19 18:03	12/07/19 18:42	1
2,4,6-Tribromophenol	65		31 - 143				12/06/19 18:03	12/07/19 18:42	1
Terphenyl-d14	119		42 - 157				12/06/19 18:03	12/07/19 18:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.79	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Arsenic	6.3		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Barium	40		0.59	0.068	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Beryllium	0.81		0.24	0.056	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Boron	20		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Cadmium	0.075	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Calcium	29000		12	2.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Chromium	19	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Cobalt	15		0.30	0.078	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Copper	28		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Iron	19000	B	12	6.2	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Lead	15		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Magnesium	18000		5.9	3.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Manganese	280		0.59	0.086	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Nickel	40		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Potassium	3500		30	11	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Selenium	0.73		0.59	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Silver	2.3		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Sodium	200		59	8.8	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Thallium	1.2		0.59	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Vanadium	22		0.30	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1
Zinc	49		1.2	0.52	mg/Kg	☼	12/05/19 18:06	12/06/19 19:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 04:56	1
Boron	0.095	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 04:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (6-12)

Lab Sample ID: 500-174194-18

Date Collected: 11/26/19 13:23

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 04:56	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:56	1
Cobalt	0.033		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:56	1
Iron	0.24	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 04:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 04:56	1
Manganese	2.2		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:56	1
Nickel	0.090		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:56	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 04:56	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 04:56	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 04:56	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:39	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.018	0.0060	mg/Kg	☼	12/09/19 15:35	12/10/19 09:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			12/03/19 13:21	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (12-18)

Lab Sample ID: 500-174194-19

Date Collected: 11/26/19 13:30

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Acetone	0.0075	J	0.017	0.0075	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	11/27/19 17:40	12/07/19 02:16	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/27/19 17:40	12/07/19 02:16	1
Dibromofluoromethane	102		75 - 126	11/27/19 17:40	12/07/19 02:16	1
Toluene-d8 (Surr)	96		75 - 124	11/27/19 17:40	12/07/19 02:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (12-18)

Lab Sample ID: 500-174194-19

Date Collected: 11/26/19 13:30

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Phenanthrene	0.076		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (12-18)

Lab Sample ID: 500-174194-19

Date Collected: 11/26/19 13:30

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	71		31 - 166				12/06/19 18:03	12/07/19 19:06	1
Phenol-d5	81		30 - 153				12/06/19 18:03	12/07/19 19:06	1
Nitrobenzene-d5	97		37 - 147				12/06/19 18:03	12/07/19 19:06	1
2-Fluorobiphenyl	91		43 - 145				12/06/19 18:03	12/07/19 19:06	1
2,4,6-Tribromophenol	64		31 - 143				12/06/19 18:03	12/07/19 19:06	1
Terphenyl-d14	114		42 - 157				12/06/19 18:03	12/07/19 19:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.77	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Arsenic	7.7		0.58	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Barium	40		0.58	0.066	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Beryllium	0.72		0.23	0.054	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Boron	17		2.9	0.27	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Calcium	57000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:31	10
Chromium	17	B	0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Copper	26		0.58	0.16	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Iron	20000	B	12	6.0	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Lead	14		0.29	0.13	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Magnesium	24000		5.8	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Manganese	320		0.58	0.084	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Nickel	36		0.58	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Potassium	3000		29	10	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Selenium	0.67		0.58	0.34	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Silver	2.3		0.29	0.075	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Sodium	180		58	8.6	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Thallium	1.2		0.58	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1
Zinc	60		1.2	0.51	mg/Kg	☼	12/05/19 18:06	12/06/19 19:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.68		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 05:00	1
Boron	0.12	J	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (12-18)

Lab Sample ID: 500-174194-19

Date Collected: 11/26/19 13:30

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 05:00	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:00	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:00	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:44	12/09/19 13:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 05:00	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:00	1
Nickel	0.048		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:00	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 05:00	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:00	1
Zinc	0.021	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 05:00	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.027		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:44	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.020	0.0068	mg/Kg	☼	12/09/19 15:35	12/10/19 09:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/03/19 13:29	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 02:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	11/27/19 17:40	12/07/19 02:41	1
4-Bromofluorobenzene (Surr)	106		75 - 131	11/27/19 17:40	12/07/19 02:41	1
Dibromofluoromethane	99		75 - 126	11/27/19 17:40	12/07/19 02:41	1
Toluene-d8 (Surr)	100		75 - 124	11/27/19 17:40	12/07/19 02:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Phenanthrene	0.056		0.041	0.0057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/06/19 18:03	12/07/19 19:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	70		31 - 166				12/06/19 18:03	12/07/19 19:30	1
Phenol-d5	74		30 - 153				12/06/19 18:03	12/07/19 19:30	1
Nitrobenzene-d5	92		37 - 147				12/06/19 18:03	12/07/19 19:30	1
2-Fluorobiphenyl	84		43 - 145				12/06/19 18:03	12/07/19 19:30	1
2,4,6-Tribromophenol	56		31 - 143				12/06/19 18:03	12/07/19 19:30	1
Terphenyl-d14	115		42 - 157				12/06/19 18:03	12/07/19 19:30	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.75	J	1.2	0.23	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Arsenic	7.0		0.59	0.20	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Barium	37		0.59	0.067	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Beryllium	0.67		0.24	0.055	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Boron	17		3.0	0.28	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Cadmium	0.10	J B	0.12	0.021	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Calcium	53000		120	20	mg/Kg	☼	12/05/19 18:06	12/09/19 11:43	10
Chromium	16	B	0.59	0.29	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Cobalt	13		0.30	0.077	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Copper	25		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Iron	18000	B	12	6.2	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Lead	13		0.30	0.14	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Manganese	310		0.59	0.086	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Nickel	34		0.59	0.17	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Potassium	2800		30	10	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Silver	2.0		0.30	0.076	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Sodium	170		59	8.8	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Thallium	1.1		0.59	0.30	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Vanadium	19		0.30	0.070	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1
Zinc	49		1.2	0.52	mg/Kg	☼	12/05/19 18:06	12/06/19 19:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.72		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 05:04	1
Boron	1.2	F1	0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 05:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:04	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:04	1
Iron	0.33	J ^	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 05:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 05:04	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:04	1
Nickel	0.052		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 05:04	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:04	1
Zinc	0.088	J	0.50	0.020	mg/L		12/05/19 15:44	12/07/19 05:04	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.053		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 05:48	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 16:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 16:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 10:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.020	0.0065	mg/Kg	☼	12/09/19 15:35	12/10/19 09:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 13:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Acetone	<0.019		0.019	0.0083	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	11/27/19 17:40	12/07/19 03:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	11/27/19 17:40	12/07/19 03:07	1
4-Bromofluorobenzene (Surr)	104		75 - 131	11/27/19 17:40	12/07/19 03:07	1
Dibromofluoromethane	102		75 - 126	11/27/19 17:40	12/07/19 03:07	1
Toluene-d8 (Surr)	96		75 - 124	11/27/19 17:40	12/07/19 03:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Bis(2-chloroethyl)ether	<0.21	*	0.21	0.062	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2-Methylphenol	<0.21	*	0.21	0.067	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,2'-oxybis[1-chloropropane]	<0.21	*	0.21	0.048	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
N-Nitrosodi-n-propylamine	<0.084	*	0.084	0.051	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2-Chlorophenol	<0.21	*	0.21	0.071	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Bis(2-chloroethoxy)methane	<0.21	*	0.21	0.042	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Isophorone	<0.21	*	0.21	0.047	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4-Chloroaniline	<0.84		0.84	0.19	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2-Methylnaphthalene	<0.084		0.084	0.0076	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2-Nitroaniline	<0.21	*	0.21	0.056	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4-Nitrophenol	<0.84		0.84	0.39	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Butyl benzyl phthalate	<0.21	*	0.21	0.079	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Bis(2-ethylhexyl) phthalate	<0.21	*	0.21	0.076	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/05/19 07:47	12/06/19 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		31 - 166				12/05/19 07:47	12/06/19 01:03	1
Phenol-d5	70		30 - 153				12/05/19 07:47	12/06/19 01:03	1
Nitrobenzene-d5	58		37 - 147				12/05/19 07:47	12/06/19 01:03	1
2-Fluorobiphenyl	75		43 - 145				12/05/19 07:47	12/06/19 01:03	1
2,4,6-Tribromophenol	71		31 - 143				12/05/19 07:47	12/06/19 01:03	1
Terphenyl-d14	96		42 - 157				12/05/19 07:47	12/06/19 01:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.71	J B	1.2	0.23	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Arsenic	7.3		0.58	0.20	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Barium	41		0.58	0.067	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Beryllium	0.69		0.23	0.055	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Boron	16		2.9	0.27	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Cadmium	0.14	B	0.12	0.021	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Calcium	58000	B	120	20	mg/Kg	☼	12/05/19 18:00	12/09/19 19:54	10
Chromium	18	B	0.58	0.29	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Cobalt	13		0.29	0.077	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Copper	26		0.58	0.16	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Iron	19000		12	6.1	mg/Kg	☼	12/05/19 18:00	12/09/19 19:50	1
Lead	14		0.29	0.13	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Magnesium	22000	B	5.8	2.9	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Manganese	300	B	0.58	0.085	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Nickel	36		0.58	0.17	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Potassium	2800		29	10	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Silver	2.0		0.29	0.075	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Sodium	190		58	8.6	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Vanadium	19		0.29	0.069	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1
Zinc	56		1.2	0.51	mg/Kg	☼	12/05/19 18:00	12/07/19 02:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.83		0.50	0.050	mg/L		12/05/19 15:46	12/06/19 14:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:46	12/06/19 14:27	1
Boron	1.3	F1	0.50	0.050	mg/L		12/05/19 15:46	12/06/19 14:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:46	12/06/19 14:27	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:27	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:27	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:46	12/06/19 14:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:46	12/06/19 14:27	1
Manganese	1.8		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:27	1
Nickel	0.038		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:27	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:46	12/06/19 14:27	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:27	1
Zinc	0.085	J	0.50	0.020	mg/L		12/05/19 15:46	12/06/19 14:27	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.16		0.025	0.010	mg/L		12/06/19 15:39	12/09/19 12:41	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:46	12/09/19 18:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:46	12/06/19 22:16	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/19 16:30	12/06/19 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.020	0.0067	mg/Kg	☼	12/09/19 15:35	12/10/19 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3		0.2	0.2	SU			12/03/19 13:37	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

GC/MS VOA

Prep Batch: 518801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	5035	
500-174194-7 - DL	2615V2-AI-B13 (0-6)	Total/NA	Solid	5035	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	5035	
500-174194-17 - DL	2615V2-AI-B06 (0-6)	Total/NA	Solid	5035	

Prep Batch: 518917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	5035	
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	5035	
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	5035	
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	5035	
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	5035	
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	5035	
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	5035	
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	5035	
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	5035	
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	5035	
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	5035	
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	5035	
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	5035	
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	5035	
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	5035	
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	5035	
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	5035	
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	5035	
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	5035	

Analysis Batch: 519068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	8260B	518917
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	8260B	518917
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	8260B	518917
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	8260B	518917
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	8260B	518917
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	8260B	518917
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	8260B	518917
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	8260B	518917
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	8260B	518917
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	8260B	518917
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	8260B	518917
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	8260B	518917
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	8260B	518917
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	8260B	518917
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	8260B	518917
MB 500-519068/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519068/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 519216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	8260B	518801
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	8260B	518801

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

GC/MS VOA (Continued)

Analysis Batch: 519216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-519216/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519216/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 519228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	8260B	518917
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	8260B	518917
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	8260B	518917
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	8260B	518917
MB 500-519228/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-519228/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-519228/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 519527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7 - DL	2615V2-AI-B13 (0-6)	Total/NA	Solid	8260B	518801
500-174194-17 - DL	2615V2-AI-B06 (0-6)	Total/NA	Solid	8260B	518801
MB 500-519527/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-519527/4	Lab Control Sample	Total/NA	Solid	8260B	

Leach Batch: 519571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7 - DL	2615V2-AI-B13 (0-6)	TCLP	Solid	1311	
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	1311	
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	1311	
500-174194-17 - DL	2615V2-AI-B06 (0-6)	TCLP	Solid	1311	
LB 500-519571/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 519841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7 - DL	2615V2-AI-B13 (0-6)	TCLP	Solid	8260B	519571
LB 500-519571/1-A	Method Blank	TCLP	Solid	8260B	519571
MB 500-519841/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519841/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 519909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	8260B	519571
MB 500-519909/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519909/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 520187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	8260B	519571
500-174194-17 - DL	2615V2-AI-B06 (0-6)	TCLP	Solid	8260B	519571
MB 500-520187/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-520187/4	Lab Control Sample	Total/NA	Solid	8260B	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

GC/MS Semi VOA

Leach Batch: 518668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	1311	
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	1311	
LB 500-518668/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 518838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	3541	
MB 500-518838/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-518838/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 519005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	8270D	518838

Analysis Batch: 519028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-518838/1-A	Method Blank	Total/NA	Solid	8270D	518838
LCS 500-518838/2-A	Lab Control Sample	Total/NA	Solid	8270D	518838

Prep Batch: 519101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	3510C	518668
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	3510C	518668
LB 500-518668/1-C	Method Blank	TCLP	Solid	3510C	518668
MB 500-519101/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-519101/2-A	Lab Control Sample	Total/NA	Solid	3510C	

Analysis Batch: 519246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	8270D	519101
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	8270D	519101
LB 500-518668/1-C	Method Blank	TCLP	Solid	8270D	519101
MB 500-519101/1-A	Method Blank	Total/NA	Solid	8270D	519101
LCS 500-519101/2-A	Lab Control Sample	Total/NA	Solid	8270D	519101

Prep Batch: 519281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	3541	
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	3541	
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	3541	
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	3541	
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	3541	
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	3541	
500-174194-7 - DL	2615V2-AI-B13 (0-6)	Total/NA	Solid	3541	
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	3541	
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	3541	
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	3541	
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	3541	
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	3541	
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	3541	
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

GC/MS Semi VOA (Continued)

Prep Batch: 519281 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	3541	
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	3541	
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	3541	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	3541	
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	3541	
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	3541	
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	3541	
MB 500-519281/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-519281/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-174194-1 MS	2615V2-AI-B05 (0-6)	Total/NA	Solid	3541	
500-174194-1 MSD	2615V2-AI-B05 (0-6)	Total/NA	Solid	3541	

Analysis Batch: 519291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	8270D	519281
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	8270D	519281
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	8270D	519281
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	8270D	519281
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	8270D	519281
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	8270D	519281
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	8270D	519281
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	8270D	519281
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	8270D	519281
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	8270D	519281
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	8270D	519281
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	8270D	519281
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	8270D	519281
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	8270D	519281
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	8270D	519281
MB 500-519281/1-A	Method Blank	Total/NA	Solid	8270D	519281
LCS 500-519281/2-A	Lab Control Sample	Total/NA	Solid	8270D	519281
500-174194-1 MS	2615V2-AI-B05 (0-6)	Total/NA	Solid	8270D	519281
500-174194-1 MSD	2615V2-AI-B05 (0-6)	Total/NA	Solid	8270D	519281

Analysis Batch: 519297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	8270D	519281
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	8270D	519281
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	8270D	519281
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	8270D	519281

Analysis Batch: 519624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7 - DL	2615V2-AI-B13 (0-6)	Total/NA	Solid	8270D	519281
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	8270D	519281

GC Semi VOA

Leach Batch: 518668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

GC Semi VOA (Continued)

Leach Batch: 518668 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	1311	
LB 500-518668/1-E	Method Blank	TCLP	Solid	1311	

Prep Batch: 519560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	3510C	518668
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	3510C	518668
MB 500-519560/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-519560/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCS 500-519560/3-A	Lab Control Sample	Total/NA	Solid	3510C	

Prep Batch: 519604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	3541	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	3541	
MB 500-519604/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-519604/3-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 519607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	8081B	519560
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	8081B	519560
MB 500-519560/1-A	Method Blank	Total/NA	Solid	8081B	519560
LCS 500-519560/2-A	Lab Control Sample	Total/NA	Solid	8081B	519560
LCS 500-519560/3-A	Lab Control Sample	Total/NA	Solid	8081B	519560

Analysis Batch: 519618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	8082A	519604
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	8082A	519604
MB 500-519604/1-A	Method Blank	Total/NA	Solid	8082A	519604
LCS 500-519604/3-A	Lab Control Sample	Total/NA	Solid	8082A	519604

Prep Batch: 519789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	8151A	518668
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	8151A	518668
LB 500-518668/1-E	Method Blank	TCLP	Solid	8151A	518668
MB 500-519789/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 500-519789/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 519870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	8151	519789
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	8151	519789
LB 500-518668/1-E	Method Blank	TCLP	Solid	8151	519789
MB 500-519789/1-A	Method Blank	Total/NA	Solid	8151	519789
LCS 500-519789/2-A	Lab Control Sample	Total/NA	Solid	8151	519789

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals

Leach Batch: 518668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	TCLP	Solid	1311	
500-174194-2	2615V2-AI-B05 (6-12)	TCLP	Solid	1311	
500-174194-3	2615V2-AI-B05 (6-12)D	TCLP	Solid	1311	
500-174194-4	2615V2-AI-B05 (12-18)	TCLP	Solid	1311	
500-174194-5	2615V2-AI-B05 (18-24)	TCLP	Solid	1311	
500-174194-6	2615V2-AI-B05 (24-30)	TCLP	Solid	1311	
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	1311	
500-174194-8	2615V2-AI-B13 (6-12)	TCLP	Solid	1311	
500-174194-9	2615V2-AI-B13 (12-18)	TCLP	Solid	1311	
500-174194-10	2615V2-AI-B13 (18-24)	TCLP	Solid	1311	
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	1311	
500-174194-12	2615V2-AI-B16 (0-6)	TCLP	Solid	1311	
500-174194-13	2615V2-AI-B16 (6-12)	TCLP	Solid	1311	
500-174194-14	2615V2-AI-B16 (12-18)	TCLP	Solid	1311	
500-174194-16	2615V2-AI-B16 (24-30)	TCLP	Solid	1311	
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	1311	
500-174194-18	2615V2-AI-B06 (6-12)	TCLP	Solid	1311	
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	1311	
500-174194-20	2615V2-AI-B06 (18-24)	TCLP	Solid	1311	
LB 500-518668/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518668/1-D	Method Blank	TCLP	Solid	1311	
500-174194-9 MS	2615V2-AI-B13 (12-18)	TCLP	Solid	1311	
500-174194-20 MS	2615V2-AI-B06 (18-24)	TCLP	Solid	1311	
500-174194-9 DU	2615V2-AI-B13 (12-18)	TCLP	Solid	1311	
500-174194-20 DU	2615V2-AI-B06 (18-24)	TCLP	Solid	1311	

Leach Batch: 518670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	1311	
LB2 500-518670/1-B	Method Blank	TCLP	Solid	1311	
LB2 500-518670/1-C	Method Blank	TCLP	Solid	1311	

Leach Batch: 518671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	1311	
LB 500-518671/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518671/1-C	Method Blank	TCLP	Solid	1311	
500-174194-21 MS	2615V2-AI-B06 (24-30)	TCLP	Solid	1311	
500-174194-21 DU	2615V2-AI-B06 (24-30)	TCLP	Solid	1311	

Leach Batch: 518956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	SPLP East	Solid	1312	
500-174194-2	2615V2-AI-B05 (6-12)	SPLP East	Solid	1312	
500-174194-3	2615V2-AI-B05 (6-12)D	SPLP East	Solid	1312	
500-174194-4	2615V2-AI-B05 (12-18)	SPLP East	Solid	1312	
500-174194-5	2615V2-AI-B05 (18-24)	SPLP East	Solid	1312	
500-174194-6	2615V2-AI-B05 (24-30)	SPLP East	Solid	1312	
500-174194-7	2615V2-AI-B13 (0-6)	SPLP East	Solid	1312	
500-174194-8	2615V2-AI-B13 (6-12)	SPLP East	Solid	1312	
500-174194-9	2615V2-AI-B13 (12-18)	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals (Continued)

Leach Batch: 518956 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-10	2615V2-AI-B13 (18-24)	SPLP East	Solid	1312	
500-174194-11	2615V2-AI-B13 (24-30)	SPLP East	Solid	1312	
500-174194-12	2615V2-AI-B16 (0-6)	SPLP East	Solid	1312	
500-174194-13	2615V2-AI-B16 (6-12)	SPLP East	Solid	1312	
500-174194-14	2615V2-AI-B16 (12-18)	SPLP East	Solid	1312	
500-174194-15	2615V2-AI-B16 (18-24)	SPLP East	Solid	1312	
500-174194-16	2615V2-AI-B16 (24-30)	SPLP East	Solid	1312	
500-174194-17	2615V2-AI-B06 (0-6)	SPLP East	Solid	1312	
500-174194-18	2615V2-AI-B06 (6-12)	SPLP East	Solid	1312	
500-174194-19	2615V2-AI-B06 (12-18)	SPLP East	Solid	1312	
500-174194-20	2615V2-AI-B06 (18-24)	SPLP East	Solid	1312	
LB 500-518956/1-B	Method Blank	SPLP East	Solid	1312	
500-174194-20 MS	2615V2-AI-B06 (18-24)	SPLP East	Solid	1312	
500-174194-20 DU	2615V2-AI-B06 (18-24)	SPLP East	Solid	1312	

Leach Batch: 518974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	SPLP East	Solid	1312	
LB 500-518974/1-B	Method Blank	SPLP East	Solid	1312	
500-174194-21 MS	2615V2-AI-B06 (24-30)	SPLP East	Solid	1312	
500-174194-21 DU	2615V2-AI-B06 (24-30)	SPLP East	Solid	1312	

Prep Batch: 518997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	TCLP	Solid	3010A	518668
500-174194-2	2615V2-AI-B05 (6-12)	TCLP	Solid	3010A	518668
500-174194-3	2615V2-AI-B05 (6-12)D	TCLP	Solid	3010A	518668
500-174194-4	2615V2-AI-B05 (12-18)	TCLP	Solid	3010A	518668
500-174194-5	2615V2-AI-B05 (18-24)	TCLP	Solid	3010A	518668
500-174194-6	2615V2-AI-B05 (24-30)	TCLP	Solid	3010A	518668
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	3010A	518668
500-174194-8	2615V2-AI-B13 (6-12)	TCLP	Solid	3010A	518668
500-174194-9	2615V2-AI-B13 (12-18)	TCLP	Solid	3010A	518668
500-174194-10	2615V2-AI-B13 (18-24)	TCLP	Solid	3010A	518668
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	3010A	518668
500-174194-12	2615V2-AI-B16 (0-6)	TCLP	Solid	3010A	518668
500-174194-13	2615V2-AI-B16 (6-12)	TCLP	Solid	3010A	518668
500-174194-14	2615V2-AI-B16 (12-18)	TCLP	Solid	3010A	518668
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	3010A	518670
500-174194-16	2615V2-AI-B16 (24-30)	TCLP	Solid	3010A	518668
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	3010A	518668
500-174194-18	2615V2-AI-B06 (6-12)	TCLP	Solid	3010A	518668
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	3010A	518668
500-174194-20	2615V2-AI-B06 (18-24)	TCLP	Solid	3010A	518668
LB 500-518668/1-B	Method Blank	TCLP	Solid	3010A	518668
LB2 500-518670/1-B	Method Blank	TCLP	Solid	3010A	518670
LCS 500-518997/25-A	Lab Control Sample	Total/NA	Solid	3010A	
LCS 500-518997/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174194-20 MS	2615V2-AI-B06 (18-24)	TCLP	Solid	3010A	518668
500-174194-20 DU	2615V2-AI-B06 (18-24)	TCLP	Solid	3010A	518668

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals

Prep Batch: 518998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	3010A	518671
LB 500-518671/1-B	Method Blank	TCLP	Solid	3010A	518671
LCS 500-518998/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174194-21 MS	2615V2-AI-B06 (24-30)	TCLP	Solid	3010A	518671
500-174194-21 DU	2615V2-AI-B06 (24-30)	TCLP	Solid	3010A	518671

Prep Batch: 519016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	7470A	518670
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	7470A	518671
LB 500-518671/1-C	Method Blank	TCLP	Solid	7470A	518671
LB2 500-518670/1-C	Method Blank	TCLP	Solid	7470A	518670
MB 500-519016/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-519016/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 519024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	3050B	
MB 500-519024/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-519024/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 519025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	3050B	
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	3050B	
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	3050B	
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	3050B	
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	3050B	
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	3050B	
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	3050B	
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	3050B	
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	3050B	
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	3050B	
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	3050B	
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	3050B	
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	3050B	
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	3050B	
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	3050B	
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	3050B	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	3050B	
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	3050B	
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	3050B	
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	3050B	
MB 500-519025/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-519025/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-174194-1 MS	2615V2-AI-B05 (0-6)	Total/NA	Solid	3050B	
500-174194-1 MSD	2615V2-AI-B05 (0-6)	Total/NA	Solid	3050B	
500-174194-1 DU	2615V2-AI-B05 (0-6)	Total/NA	Solid	3050B	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals

Prep Batch: 519138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	TCLP	Solid	7470A	518668
500-174194-2	2615V2-AI-B05 (6-12)	TCLP	Solid	7470A	518668
500-174194-3	2615V2-AI-B05 (6-12)D	TCLP	Solid	7470A	518668
500-174194-4	2615V2-AI-B05 (12-18)	TCLP	Solid	7470A	518668
500-174194-5	2615V2-AI-B05 (18-24)	TCLP	Solid	7470A	518668
500-174194-6	2615V2-AI-B05 (24-30)	TCLP	Solid	7470A	518668
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	7470A	518668
500-174194-8	2615V2-AI-B13 (6-12)	TCLP	Solid	7470A	518668
500-174194-9	2615V2-AI-B13 (12-18)	TCLP	Solid	7470A	518668
500-174194-10	2615V2-AI-B13 (18-24)	TCLP	Solid	7470A	518668
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	7470A	518668
500-174194-12	2615V2-AI-B16 (0-6)	TCLP	Solid	7470A	518668
500-174194-13	2615V2-AI-B16 (6-12)	TCLP	Solid	7470A	518668
500-174194-14	2615V2-AI-B16 (12-18)	TCLP	Solid	7470A	518668
500-174194-16	2615V2-AI-B16 (24-30)	TCLP	Solid	7470A	518668
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	7470A	518668
500-174194-18	2615V2-AI-B06 (6-12)	TCLP	Solid	7470A	518668
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	7470A	518668
500-174194-20	2615V2-AI-B06 (18-24)	TCLP	Solid	7470A	518668
LB 500-518668/1-D	Method Blank	TCLP	Solid	7470A	518668
MB 500-519138/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-519138/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174194-9 MS	2615V2-AI-B13 (12-18)	TCLP	Solid	7470A	518668
500-174194-9 DU	2615V2-AI-B13 (12-18)	TCLP	Solid	7470A	518668

Prep Batch: 519149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	7471B	
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	7471B	
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	7471B	
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	7471B	
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	7471B	
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	7471B	
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	7471B	
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	7471B	
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	7471B	
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	7471B	
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	7471B	
MB 500-519149/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-519149/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174194-10 MS	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	
500-174194-10 MSD	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	
500-174194-10 DU	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	

Analysis Batch: 519167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	7470A	519016
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	7470A	519016
LB 500-518671/1-C	Method Blank	TCLP	Solid	7470A	519016
LB2 500-518670/1-C	Method Blank	TCLP	Solid	7470A	519016

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals (Continued)

Analysis Batch: 519167 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-519016/12-A	Method Blank	Total/NA	Solid	7470A	519016
LCS 500-519016/13-A	Lab Control Sample	Total/NA	Solid	7470A	519016

Prep Batch: 519239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	SPLP East	Solid	3010A	518956
500-174194-2	2615V2-AI-B05 (6-12)	SPLP East	Solid	3010A	518956
500-174194-3	2615V2-AI-B05 (6-12)D	SPLP East	Solid	3010A	518956
500-174194-4	2615V2-AI-B05 (12-18)	SPLP East	Solid	3010A	518956
500-174194-5	2615V2-AI-B05 (18-24)	SPLP East	Solid	3010A	518956
500-174194-6	2615V2-AI-B05 (24-30)	SPLP East	Solid	3010A	518956
500-174194-7	2615V2-AI-B13 (0-6)	SPLP East	Solid	3010A	518956
500-174194-8	2615V2-AI-B13 (6-12)	SPLP East	Solid	3010A	518956
500-174194-9	2615V2-AI-B13 (12-18)	SPLP East	Solid	3010A	518956
500-174194-10	2615V2-AI-B13 (18-24)	SPLP East	Solid	3010A	518956
500-174194-11	2615V2-AI-B13 (24-30)	SPLP East	Solid	3010A	518956
500-174194-12	2615V2-AI-B16 (0-6)	SPLP East	Solid	3010A	518956
500-174194-13	2615V2-AI-B16 (6-12)	SPLP East	Solid	3010A	518956
500-174194-14	2615V2-AI-B16 (12-18)	SPLP East	Solid	3010A	518956
500-174194-15	2615V2-AI-B16 (18-24)	SPLP East	Solid	3010A	518956
500-174194-16	2615V2-AI-B16 (24-30)	SPLP East	Solid	3010A	518956
500-174194-17	2615V2-AI-B06 (0-6)	SPLP East	Solid	3010A	518956
500-174194-18	2615V2-AI-B06 (6-12)	SPLP East	Solid	3010A	518956
500-174194-19	2615V2-AI-B06 (12-18)	SPLP East	Solid	3010A	518956
500-174194-20	2615V2-AI-B06 (18-24)	SPLP East	Solid	3010A	518956
LB 500-518956/1-B	Method Blank	SPLP East	Solid	3010A	518956
LCS 500-519239/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174194-20 MS	2615V2-AI-B06 (18-24)	SPLP East	Solid	3010A	518956
500-174194-20 DU	2615V2-AI-B06 (18-24)	SPLP East	Solid	3010A	518956

Prep Batch: 519240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	SPLP East	Solid	3010A	518974
LB 500-518974/1-B	Method Blank	SPLP East	Solid	3010A	518974
LCS 500-519240/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174194-21 MS	2615V2-AI-B06 (24-30)	SPLP East	Solid	3010A	518974
500-174194-21 DU	2615V2-AI-B06 (24-30)	SPLP East	Solid	3010A	518974

Analysis Batch: 519450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	TCLP	Solid	6010B	518997
500-174194-2	2615V2-AI-B05 (6-12)	TCLP	Solid	6010B	518997
500-174194-3	2615V2-AI-B05 (6-12)D	TCLP	Solid	6010B	518997
500-174194-4	2615V2-AI-B05 (12-18)	TCLP	Solid	6010B	518997
500-174194-5	2615V2-AI-B05 (18-24)	TCLP	Solid	6010B	518997
500-174194-6	2615V2-AI-B05 (24-30)	TCLP	Solid	6010B	518997
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	6010B	518997
500-174194-8	2615V2-AI-B13 (6-12)	TCLP	Solid	6010B	518997
500-174194-9	2615V2-AI-B13 (12-18)	TCLP	Solid	6010B	518997
500-174194-10	2615V2-AI-B13 (18-24)	TCLP	Solid	6010B	518997
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	6010B	518997

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals (Continued)

Analysis Batch: 519450 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-12	2615V2-AI-B16 (0-6)	TCLP	Solid	6010B	518997
500-174194-13	2615V2-AI-B16 (6-12)	TCLP	Solid	6010B	518997
500-174194-14	2615V2-AI-B16 (12-18)	TCLP	Solid	6010B	518997
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	6010B	518997
500-174194-16	2615V2-AI-B16 (24-30)	TCLP	Solid	6010B	518997
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	6010B	518997
500-174194-18	2615V2-AI-B06 (6-12)	TCLP	Solid	6010B	518997
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	6010B	518997
500-174194-20	2615V2-AI-B06 (18-24)	TCLP	Solid	6010B	518997
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	6010B	519024
LB 500-518668/1-B	Method Blank	TCLP	Solid	6010B	518997
LB2 500-518670/1-B	Method Blank	TCLP	Solid	6010B	518997
MB 500-519024/1-A	Method Blank	Total/NA	Solid	6010B	519024
LCS 500-518997/25-A	Lab Control Sample	Total/NA	Solid	6010B	518997
LCS 500-518997/2-A	Lab Control Sample	Total/NA	Solid	6010B	518997
LCS 500-519024/2-A	Lab Control Sample	Total/NA	Solid	6010B	519024
500-174194-20 MS	2615V2-AI-B06 (18-24)	TCLP	Solid	6010B	518997
500-174194-20 DU	2615V2-AI-B06 (18-24)	TCLP	Solid	6010B	518997

Analysis Batch: 519451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	6010B	519025
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	6010B	519025
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	6010B	519025
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	6010B	519025
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	6010B	519025
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	6010B	519025
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	6010B	519025
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	6010B	519025
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	6010B	519025
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	6010B	519025
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	6010B	519025
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	6010B	519025
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	6010B	519025
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	6010B	519025
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	6010B	519025
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	6010B	519025
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	6010B	519025
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	6010B	519025
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	6010B	519025
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	6010B	519025
MB 500-519025/1-A	Method Blank	Total/NA	Solid	6010B	519025
LCS 500-519025/2-A	Lab Control Sample	Total/NA	Solid	6010B	519025
500-174194-1 MS	2615V2-AI-B05 (0-6)	Total/NA	Solid	6010B	519025
500-174194-1 MSD	2615V2-AI-B05 (0-6)	Total/NA	Solid	6010B	519025
500-174194-1 DU	2615V2-AI-B05 (0-6)	Total/NA	Solid	6010B	519025

Analysis Batch: 519452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	6010B	518998
LB 500-518671/1-B	Method Blank	TCLP	Solid	6010B	518998

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals (Continued)

Analysis Batch: 519452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-518998/2-A	Lab Control Sample	Total/NA	Solid	6010B	518998
500-174194-21 MS	2615V2-AI-B06 (24-30)	TCLP	Solid	6010B	518998
500-174194-21 DU	2615V2-AI-B06 (24-30)	TCLP	Solid	6010B	518998

Analysis Batch: 519532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	6020A	518998
LB 500-518671/1-B	Method Blank	TCLP	Solid	6020A	518998
LCS 500-518998/2-A	Lab Control Sample	Total/NA	Solid	6020A	518998
500-174194-21 MS	2615V2-AI-B06 (24-30)	TCLP	Solid	6020A	518998
500-174194-21 DU	2615V2-AI-B06 (24-30)	TCLP	Solid	6020A	518998

Analysis Batch: 519537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	7471B	519149
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	7471B	519149
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	7471B	519149
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	7471B	519149
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	7471B	519149
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	7471B	519149
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	7471B	519149
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	7471B	519149
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	7471B	519149
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	519149
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	7471B	519149
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	7471B	519149
MB 500-519149/12-A	Method Blank	Total/NA	Solid	7471B	519149
LCS 500-519149/13-A	Lab Control Sample	Total/NA	Solid	7471B	519149
500-174194-10 MS	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	519149
500-174194-10 MSD	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	519149
500-174194-10 DU	2615V2-AI-B13 (18-24)	Total/NA	Solid	7471B	519149

Prep Batch: 519538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	7471B	
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	7471B	
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	7471B	
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	7471B	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	7471B	
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	7471B	
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	7471B	
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	7471B	
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	7471B	
MB 500-519538/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-519538/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 519550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	TCLP	Solid	7470A	519138
500-174194-2	2615V2-AI-B05 (6-12)	TCLP	Solid	7470A	519138
500-174194-3	2615V2-AI-B05 (6-12)D	TCLP	Solid	7470A	519138

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals (Continued)

Analysis Batch: 519550 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-4	2615V2-AI-B05 (12-18)	TCLP	Solid	7470A	519138
500-174194-5	2615V2-AI-B05 (18-24)	TCLP	Solid	7470A	519138
500-174194-6	2615V2-AI-B05 (24-30)	TCLP	Solid	7470A	519138
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	7470A	519138
500-174194-8	2615V2-AI-B13 (6-12)	TCLP	Solid	7470A	519138
500-174194-9	2615V2-AI-B13 (12-18)	TCLP	Solid	7470A	519138
500-174194-10	2615V2-AI-B13 (18-24)	TCLP	Solid	7470A	519138
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	7470A	519138
500-174194-12	2615V2-AI-B16 (0-6)	TCLP	Solid	7470A	519138
500-174194-13	2615V2-AI-B16 (6-12)	TCLP	Solid	7470A	519138
500-174194-14	2615V2-AI-B16 (12-18)	TCLP	Solid	7470A	519138
500-174194-16	2615V2-AI-B16 (24-30)	TCLP	Solid	7470A	519138
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	7470A	519138
500-174194-18	2615V2-AI-B06 (6-12)	TCLP	Solid	7470A	519138
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	7470A	519138
500-174194-20	2615V2-AI-B06 (18-24)	TCLP	Solid	7470A	519138
LB 500-518668/1-D	Method Blank	TCLP	Solid	7470A	519138
MB 500-519138/12-A	Method Blank	Total/NA	Solid	7470A	519138
LCS 500-519138/13-A	Lab Control Sample	Total/NA	Solid	7470A	519138
500-174194-9 MS	2615V2-AI-B13 (12-18)	TCLP	Solid	7470A	519138
500-174194-9 DU	2615V2-AI-B13 (12-18)	TCLP	Solid	7470A	519138

Analysis Batch: 519564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	SPLP East	Solid	6010B	519240
LB 500-518974/1-B	Method Blank	SPLP East	Solid	6010B	519240
LCS 500-519240/2-A	Lab Control Sample	Total/NA	Solid	6010B	519240
500-174194-21 MS	2615V2-AI-B06 (24-30)	SPLP East	Solid	6010B	519240
500-174194-21 DU	2615V2-AI-B06 (24-30)	SPLP East	Solid	6010B	519240

Analysis Batch: 519568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	6010B	519025
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	6010B	519025
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	6010B	519025
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	6010B	519025
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	6010B	519025
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	6010B	519025
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	6010B	518997
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	6010B	519025
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	6010B	519025
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	6010B	519025
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	6010B	518997
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	6010B	519025
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	6010B	519025
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	6010B	518997
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	6010B	519025
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	6010B	519025
LCS 500-518997/25-A	Lab Control Sample	Total/NA	Solid	6010B	518997
LCS 500-518997/2-A	Lab Control Sample	Total/NA	Solid	6010B	518997

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals

Analysis Batch: 519678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	SPLP East	Solid	6010B	519239
500-174194-2	2615V2-AI-B05 (6-12)	SPLP East	Solid	6010B	519239
500-174194-3	2615V2-AI-B05 (6-12)D	SPLP East	Solid	6010B	519239
500-174194-4	2615V2-AI-B05 (12-18)	SPLP East	Solid	6010B	519239
500-174194-5	2615V2-AI-B05 (18-24)	SPLP East	Solid	6010B	519239
500-174194-6	2615V2-AI-B05 (24-30)	SPLP East	Solid	6010B	519239
500-174194-7	2615V2-AI-B13 (0-6)	SPLP East	Solid	6010B	519239
500-174194-8	2615V2-AI-B13 (6-12)	SPLP East	Solid	6010B	519239
500-174194-9	2615V2-AI-B13 (12-18)	SPLP East	Solid	6010B	519239
500-174194-10	2615V2-AI-B13 (18-24)	SPLP East	Solid	6010B	519239
500-174194-11	2615V2-AI-B13 (24-30)	SPLP East	Solid	6010B	519239
500-174194-12	2615V2-AI-B16 (0-6)	SPLP East	Solid	6010B	519239
500-174194-13	2615V2-AI-B16 (6-12)	SPLP East	Solid	6010B	519239
500-174194-14	2615V2-AI-B16 (12-18)	SPLP East	Solid	6010B	519239
500-174194-15	2615V2-AI-B16 (18-24)	SPLP East	Solid	6010B	519239
500-174194-16	2615V2-AI-B16 (24-30)	SPLP East	Solid	6010B	519239
500-174194-17	2615V2-AI-B06 (0-6)	SPLP East	Solid	6010B	519239
500-174194-18	2615V2-AI-B06 (6-12)	SPLP East	Solid	6010B	519239
500-174194-19	2615V2-AI-B06 (12-18)	SPLP East	Solid	6010B	519239
500-174194-20	2615V2-AI-B06 (18-24)	SPLP East	Solid	6010B	519239
LB 500-518956/1-B	Method Blank	SPLP East	Solid	6010B	519239
LCS 500-519239/2-A	Lab Control Sample	Total/NA	Solid	6010B	519239
500-174194-20 MS	2615V2-AI-B06 (18-24)	SPLP East	Solid	6010B	519239
500-174194-20 DU	2615V2-AI-B06 (18-24)	SPLP East	Solid	6010B	519239

Analysis Batch: 519679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	6010B	519024
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	6010B	519024
MB 500-519024/1-A	Method Blank	Total/NA	Solid	6010B	519024
LCS 500-519024/2-A	Lab Control Sample	Total/NA	Solid	6010B	519024

Analysis Batch: 519764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	TCLP	Solid	6020A	518997
500-174194-2	2615V2-AI-B05 (6-12)	TCLP	Solid	6020A	518997
500-174194-3	2615V2-AI-B05 (6-12)D	TCLP	Solid	6020A	518997
500-174194-4	2615V2-AI-B05 (12-18)	TCLP	Solid	6020A	518997
500-174194-5	2615V2-AI-B05 (18-24)	TCLP	Solid	6020A	518997
500-174194-6	2615V2-AI-B05 (24-30)	TCLP	Solid	6020A	518997
500-174194-7	2615V2-AI-B13 (0-6)	TCLP	Solid	6020A	518997
500-174194-8	2615V2-AI-B13 (6-12)	TCLP	Solid	6020A	518997
500-174194-9	2615V2-AI-B13 (12-18)	TCLP	Solid	6020A	518997
500-174194-10	2615V2-AI-B13 (18-24)	TCLP	Solid	6020A	518997
500-174194-11	2615V2-AI-B13 (24-30)	TCLP	Solid	6020A	518997
500-174194-12	2615V2-AI-B16 (0-6)	TCLP	Solid	6020A	518997
500-174194-13	2615V2-AI-B16 (6-12)	TCLP	Solid	6020A	518997
500-174194-14	2615V2-AI-B16 (12-18)	TCLP	Solid	6020A	518997
500-174194-16	2615V2-AI-B16 (24-30)	TCLP	Solid	6020A	518997
500-174194-17	2615V2-AI-B06 (0-6)	TCLP	Solid	6020A	518997
500-174194-18	2615V2-AI-B06 (6-12)	TCLP	Solid	6020A	518997

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Metals (Continued)

Analysis Batch: 519764 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-19	2615V2-AI-B06 (12-18)	TCLP	Solid	6020A	518997
500-174194-20	2615V2-AI-B06 (18-24)	TCLP	Solid	6020A	518997
LB 500-518668/1-B	Method Blank	TCLP	Solid	6020A	518997
LCS 500-518997/2-A	Lab Control Sample	Total/NA	Solid	6020A	518997
500-174194-20 MS	2615V2-AI-B06 (18-24)	TCLP	Solid	6020A	518997
500-174194-20 DU	2615V2-AI-B06 (18-24)	TCLP	Solid	6020A	518997

Analysis Batch: 519765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-15	2615V2-AI-B16 (18-24)	TCLP	Solid	6020A	518997
500-174194-21	2615V2-AI-B06 (24-30)	TCLP	Solid	6020A	518998
LB 500-518671/1-B	Method Blank	TCLP	Solid	6020A	518998
LB2 500-518670/1-B	Method Blank	TCLP	Solid	6020A	518997
LCS 500-518998/2-A	Lab Control Sample	Total/NA	Solid	6020A	518998
500-174194-21 MS	2615V2-AI-B06 (24-30)	TCLP	Solid	6020A	518998
500-174194-21 DU	2615V2-AI-B06 (24-30)	TCLP	Solid	6020A	518998

Analysis Batch: 519785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	7471B	519538
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	7471B	519538
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	7471B	519538
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	7471B	519538
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	7471B	519538
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	7471B	519538
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	7471B	519538
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	7471B	519538
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	7471B	519538
MB 500-519538/12-A	Method Blank	Total/NA	Solid	7471B	519538
LCS 500-519538/13-A	Lab Control Sample	Total/NA	Solid	7471B	519538

General Chemistry

Analysis Batch: 518353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	Moisture	

Analysis Batch: 518384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-1	2615V2-AI-B05 (0-6)	Total/NA	Solid	9045D	
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	9045D	
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	9045D	
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	9045D	
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	9045D	
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	9045D	
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	9045D	
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	9045D	
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	9045D	
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	9045D	
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	9045D	
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

General Chemistry (Continued)

Analysis Batch: 518384 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	9045D	
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	9045D	
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	9045D	
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	9045D	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	9045D	
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	9045D	
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	9045D	
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	9045D	
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	9045D	
LCS 500-518384/5	Lab Control Sample	Total/NA	Solid	9045D	
LCS 500-518384/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-174194-1 DU	2615V2-AI-B05 (0-6)	Total/NA	Solid	9045D	
500-174194-18 DU	2615V2-AI-B06 (6-12)	Total/NA	Solid	9045D	

Analysis Batch: 518407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-2	2615V2-AI-B05 (6-12)	Total/NA	Solid	Moisture	
500-174194-3	2615V2-AI-B05 (6-12)D	Total/NA	Solid	Moisture	
500-174194-4	2615V2-AI-B05 (12-18)	Total/NA	Solid	Moisture	
500-174194-5	2615V2-AI-B05 (18-24)	Total/NA	Solid	Moisture	
500-174194-6	2615V2-AI-B05 (24-30)	Total/NA	Solid	Moisture	
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	Moisture	
500-174194-8	2615V2-AI-B13 (6-12)	Total/NA	Solid	Moisture	
500-174194-9	2615V2-AI-B13 (12-18)	Total/NA	Solid	Moisture	
500-174194-10	2615V2-AI-B13 (18-24)	Total/NA	Solid	Moisture	
500-174194-11	2615V2-AI-B13 (24-30)	Total/NA	Solid	Moisture	
500-174194-12	2615V2-AI-B16 (0-6)	Total/NA	Solid	Moisture	
500-174194-13	2615V2-AI-B16 (6-12)	Total/NA	Solid	Moisture	
500-174194-14	2615V2-AI-B16 (12-18)	Total/NA	Solid	Moisture	
500-174194-15	2615V2-AI-B16 (18-24)	Total/NA	Solid	Moisture	
500-174194-16	2615V2-AI-B16 (24-30)	Total/NA	Solid	Moisture	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	Moisture	
500-174194-18	2615V2-AI-B06 (6-12)	Total/NA	Solid	Moisture	
500-174194-19	2615V2-AI-B06 (12-18)	Total/NA	Solid	Moisture	
500-174194-20	2615V2-AI-B06 (18-24)	Total/NA	Solid	Moisture	
500-174194-21	2615V2-AI-B06 (24-30)	Total/NA	Solid	Moisture	
500-174194-2 DU	2615V2-AI-B05 (6-12)	Total/NA	Solid	Moisture	

Prep Batch: 519022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	7.3.4	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	7.3.4	
MB 500-519022/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 500-519022/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
500-174194-7 MS	2615V2-AI-B13 (0-6)	Total/NA	Solid	7.3.4	
500-174194-7 MSD	2615V2-AI-B13 (0-6)	Total/NA	Solid	7.3.4	

Analysis Batch: 519041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	7.3.4	519022
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	7.3.4	519022

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

General Chemistry (Continued)

Analysis Batch: 519041 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-519022/1-A	Method Blank	Total/NA	Solid	7.3.4	519022
LCS 500-519022/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	519022
500-174194-7 MS	2615V2-AI-B13 (0-6)	Total/NA	Solid	7.3.4	519022
500-174194-7 MSD	2615V2-AI-B13 (0-6)	Total/NA	Solid	7.3.4	519022

Prep Batch: 519148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	9010B	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	9010B	
MB 500-519148/1-A	Method Blank	Total/NA	Solid	9010B	
HLCS 500-519148/2-A	Lab Control Sample	Total/NA	Solid	9010B	
LCS 500-519148/3-A	Lab Control Sample	Total/NA	Solid	9010B	
LLCS 500-519148/4-A	Lab Control Sample	Total/NA	Solid	9010B	

Analysis Batch: 519223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	9014	519148
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	9014	519148
MB 500-519148/1-A	Method Blank	Total/NA	Solid	9014	519148
HLCS 500-519148/2-A	Lab Control Sample	Total/NA	Solid	9014	519148
LCS 500-519148/3-A	Lab Control Sample	Total/NA	Solid	9014	519148
LLCS 500-519148/4-A	Lab Control Sample	Total/NA	Solid	9014	519148

Analysis Batch: 519599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	9095A	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	9095A	

Analysis Batch: 519839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174194-7	2615V2-AI-B13 (0-6)	Total/NA	Solid	1010A	
500-174194-17	2615V2-AI-B06 (0-6)	Total/NA	Solid	1010A	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - TCLP Volatiles

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
LCS 500-519841/4	Lab Control Sample	99	109	96	102
LCS 500-519909/4	Lab Control Sample	104	107	101	105
LCS 500-520187/4	Lab Control Sample	101	104	99	107
MB 500-519841/6	Method Blank	100	108	92	103
MB 500-519909/6	Method Blank	107	106	106	102
MB 500-520187/6	Method Blank	108	103	104	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - TCLP Volatiles

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-174194-7 - DL	2615V2-AI-B13 (0-6)	114	94	103	105
500-174194-7	2615V2-AI-B13 (0-6)	99	102	102	100
500-174194-17 - DL	2615V2-AI-B06 (0-6)	100	106	110	101
500-174194-17	2615V2-AI-B06 (0-6)	101	105	112	101
LB 500-519571/1-A	Method Blank	111	94	101	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174194-1	2615V2-AI-B05 (0-6)	94	112	89	98
500-174194-2	2615V2-AI-B05 (6-12)	93	121	88	101
500-174194-3	2615V2-AI-B05 (6-12)D	91	109	86	98
500-174194-4	2615V2-AI-B05 (12-18)	92	107	88	98
500-174194-5	2615V2-AI-B05 (18-24)	91	105	86	98
500-174194-6	2615V2-AI-B05 (24-30)	92	105	88	97
500-174194-8	2615V2-AI-B13 (6-12)	89	105	87	96
500-174194-9	2615V2-AI-B13 (12-18)	91	106	88	97
500-174194-10	2615V2-AI-B13 (18-24)	90	103	87	97
500-174194-11	2615V2-AI-B13 (24-30)	91	101	91	93
500-174194-12	2615V2-AI-B16 (0-6)	95	113	93	97
500-174194-13	2615V2-AI-B16 (6-12)	93	105	91	97
500-174194-14	2615V2-AI-B16 (12-18)	93	99	94	95
500-174194-15	2615V2-AI-B16 (18-24)	89	103	88	96

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(70-134)	(75-131)	(75-126)	(75-124)
500-174194-16	2615V2-AI-B16 (24-30)	93	104	88	97
500-174194-18	2615V2-AI-B06 (6-12)	99	108	99	100
500-174194-19	2615V2-AI-B06 (12-18)	99	104	102	96
500-174194-20	2615V2-AI-B06 (18-24)	96	106	99	100
500-174194-21	2615V2-AI-B06 (24-30)	97	104	102	96
LCS 500-519068/4	Lab Control Sample	85	94	85	95
LCS 500-519228/4	Lab Control Sample	87	92	97	96
LCSD 500-519228/5	Lab Control Sample Dup	87	89	98	97
MB 500-519068/6	Method Blank	87	100	84	94
MB 500-519228/7	Method Blank	95	99	98	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(75-126)	(72-124)	(75-120)	(75-120)
500-174194-7	2615V2-AI-B13 (0-6)	104	103	99	103
500-174194-7 - DL	2615V2-AI-B13 (0-6)	118	104	109	100
500-174194-17	2615V2-AI-B06 (0-6)	102	103	98	100
500-174194-17 - DL	2615V2-AI-B06 (0-6)	116	105	107	103
LCS 500-519216/4	Lab Control Sample	105	102	98	103
LCS 500-519527/4	Lab Control Sample	110	101	101	104
MB 500-519216/6	Method Blank	107	107	100	102
MB 500-519527/7	Method Blank	113	105	106	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPHL
		(31-166)	(30-153)	(37-147)	(43-145)	(31-143)	(42-157)
500-174194-1	2615V2-AI-B05 (0-6)	77	69	76	96	53	100
500-174194-1 MS	2615V2-AI-B05 (0-6)	78	74	86	97	57	93
500-174194-1 MSD	2615V2-AI-B05 (0-6)	70	64	77	83	48	82
500-174194-2	2615V2-AI-B05 (6-12)	83	74	91	105	47	99
500-174194-3	2615V2-AI-B05 (6-12)D	69	63	75	90	25 X	85
500-174194-4	2615V2-AI-B05 (12-18)	77	69	83	94	47	94
500-174194-5	2615V2-AI-B05 (18-24)	74	67	75	88	43	94
500-174194-6	2615V2-AI-B05 (24-30)	78	70	79	96	50	99

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174194-7	2615V2-AI-B13 (0-6)	65	62	73	86	43	89
500-174194-7 - DL	2615V2-AI-B13 (0-6)	80	71	79	85	44	87
500-174194-8	2615V2-AI-B13 (6-12)	70	64	75	86	53	100
500-174194-9	2615V2-AI-B13 (12-18)	69	65	71	82	45	95
500-174194-10	2615V2-AI-B13 (18-24)	72	65	76	93	45	94
500-174194-11	2615V2-AI-B13 (24-30)	72	70	81	95	49	104
500-174194-12	2615V2-AI-B16 (0-6)	76	82	94	88	69	121
500-174194-13	2615V2-AI-B16 (6-12)	61	58	62	74	46	100
500-174194-14	2615V2-AI-B16 (12-18)	68	63	72	85	47	98
500-174194-15	2615V2-AI-B16 (18-24)	70	66	76	92	47	101
500-174194-16	2615V2-AI-B16 (24-30)	68	64	72	89	37	98
500-174194-17	2615V2-AI-B06 (0-6)	86	95	81	83	53	94
500-174194-18	2615V2-AI-B06 (6-12)	72	80	101	93	65	119
500-174194-19	2615V2-AI-B06 (12-18)	71	81	97	91	64	114
500-174194-20	2615V2-AI-B06 (18-24)	70	74	92	84	56	115
500-174194-21	2615V2-AI-B06 (24-30)	78	70	58	75	71	96
LCS 500-518838/2-A	Lab Control Sample	138	141	116	91	68	92
LCS 500-519281/2-A	Lab Control Sample	87	80	94	99	56	95
MB 500-518838/1-A	Method Blank	137	133	117	94	55	98
MB 500-519281/1-A	Method Blank	81	73	89	99	50	103

Surrogate Legend

- 2FP = 2-Fluorophenol
- PHL = Phenol-d5
- NBZ = Nitrobenzene-d5
- FBP = 2-Fluorobiphenyl
- TBP = 2,4,6-Tribromophenol
- TPHL = Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (27-110)	PHL (20-100)	NBZ (36-120)	FBP (34-110)	TBP (40-145)	TPHL (40-145)
LCS 500-519101/2-A	Lab Control Sample	65	44	85	109	113	120
MB 500-519101/1-A	Method Blank	62	39	80	94	74	120

Surrogate Legend

- 2FP = 2-Fluorophenol
- PHL = Phenol-d5
- NBZ = Nitrobenzene-d5
- FBP = 2-Fluorobiphenyl
- TBP = 2,4,6-Tribromophenol
- TPHL = Terphenyl-d14

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPHL (40-145)	TBP (40-145)
500-174194-7	2615V2-AI-B13 (0-6)	92	61	79	38	120	91
500-174194-17	2615V2-AI-B06 (0-6)	74	54	64	33	102	65
LB 500-518668/1-C	Method Blank	92	66	82	42	121	85

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1 (30-130)	TCX1 (30-120)
LCS 500-519560/2-A	Lab Control Sample	106	98
LCS 500-519560/3-A	Lab Control Sample	105	96
MB 500-519560/1-A	Method Blank	102	100

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1 (30-130)	TCX1 (30-120)
500-174194-7	2615V2-AI-B13 (0-6)	59	97
500-174194-17	2615V2-AI-B06 (0-6)	91	98

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1 (37-121)	TCX1 (49-129)
500-174194-7	2615V2-AI-B13 (0-6)	87	75
500-174194-17	2615V2-AI-B06 (0-6)	99	84
LCS 500-519604/3-A	Lab Control Sample	95	104
MB 500-519604/1-A	Method Blank	86	101

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (25-130)
LCS 500-519789/2-A	Lab Control Sample	73
MB 500-519789/1-A	Method Blank	79

Surrogate Legend

DCPAA = DCAA

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (25-130)
500-174194-7	2615V2-AI-B13 (0-6)	75
500-174194-17	2615V2-AI-B06 (0-6)	82
LB 500-518668/1-E	Method Blank	85

Surrogate Legend

DCPAA = DCAA

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - TCLP Volatiles

Lab Sample ID: MB 500-519841/6
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
1,1-Dichloroethene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0025	mg/L			12/10/19 18:48	1
Benzene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Carbon tetrachloride	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Chlorobenzene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Chloroform	<0.0020		0.0020	0.0010	mg/L			12/10/19 18:48	1
Tetrachloroethene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Trichloroethene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Vinyl chloride	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		12/10/19 18:48	1
4-Bromofluorobenzene (Surr)	108		72 - 124		12/10/19 18:48	1
Dibromofluoromethane	92		75 - 120		12/10/19 18:48	1
Toluene-d8 (Surr)	103		75 - 120		12/10/19 18:48	1

Lab Sample ID: LCS 500-519841/4
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0445		mg/L		89	68 - 127
1,1-Dichloroethene	0.0500	0.0479		mg/L		96	67 - 122
Methyl Ethyl Ketone	0.0500	0.0412		mg/L		82	46 - 144
Benzene	0.0500	0.0468		mg/L		94	70 - 120
Carbon tetrachloride	0.0500	0.0452		mg/L		90	59 - 133
Chlorobenzene	0.0500	0.0447		mg/L		89	70 - 120
Chloroform	0.0500	0.0447		mg/L		89	70 - 120
Tetrachloroethene	0.0500	0.0450		mg/L		90	70 - 128
Trichloroethene	0.0500	0.0454		mg/L		91	70 - 125
Vinyl chloride	0.0500	0.0587		mg/L		117	64 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		75 - 126
4-Bromofluorobenzene (Surr)	109		72 - 124
Dibromofluoromethane	96		75 - 120
Toluene-d8 (Surr)	102		75 - 120

Lab Sample ID: MB 500-519909/6
Matrix: Solid
Analysis Batch: 519909

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
1,1-Dichloroethene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0025	mg/L			12/11/19 11:16	1
Benzene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: MB 500-519909/6
Matrix: Solid
Analysis Batch: 519909

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Chlorobenzene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Chloroform	<0.0020		0.0020	0.0010	mg/L			12/11/19 11:16	1
Tetrachloroethene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Trichloroethene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Vinyl chloride	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		12/11/19 11:16	1
4-Bromofluorobenzene (Surr)	106		72 - 124		12/11/19 11:16	1
Dibromofluoromethane	106		75 - 120		12/11/19 11:16	1
Toluene-d8 (Surr)	102		75 - 120		12/11/19 11:16	1

Lab Sample ID: LCS 500-519909/4
Matrix: Solid
Analysis Batch: 519909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0491		mg/L		98	68 - 127
1,1-Dichloroethene	0.0500	0.0467		mg/L		93	67 - 122
Methyl Ethyl Ketone	0.0500	0.0402		mg/L		80	46 - 144
Benzene	0.0500	0.0464		mg/L		93	70 - 120
Carbon tetrachloride	0.0500	0.0488		mg/L		98	59 - 133
Chlorobenzene	0.0500	0.0478		mg/L		96	70 - 120
Chloroform	0.0500	0.0460		mg/L		92	70 - 120
Tetrachloroethene	0.0500	0.0437		mg/L		87	70 - 128
Trichloroethene	0.0500	0.0461		mg/L		92	70 - 125
Vinyl chloride	0.0500	0.0500		mg/L		100	64 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		75 - 126
4-Bromofluorobenzene (Surr)	107		72 - 124
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	105		75 - 120

Lab Sample ID: MB 500-520187/6
Matrix: Solid
Analysis Batch: 520187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1
1,1-Dichloroethene	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0025	mg/L			12/12/19 11:39	1
Benzene	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1
Carbon tetrachloride	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1
Chlorobenzene	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1
Chloroform	<0.0020		0.0020	0.0010	mg/L			12/12/19 11:39	1
Tetrachloroethene	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: MB 500-520187/6
Matrix: Solid
Analysis Batch: 520187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Trichloroethene	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1
Vinyl chloride	<0.0010		0.0010	0.00050	mg/L			12/12/19 11:39	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		12/12/19 11:39	1
4-Bromofluorobenzene (Surr)	103		72 - 124		12/12/19 11:39	1
Dibromofluoromethane	104		75 - 120		12/12/19 11:39	1
Toluene-d8 (Surr)	105		75 - 120		12/12/19 11:39	1

Lab Sample ID: LCS 500-520187/4
Matrix: Solid
Analysis Batch: 520187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,2-Dichloroethane	0.0500	0.0496		mg/L		99	68 - 127
1,1-Dichloroethene	0.0500	0.0535		mg/L		107	67 - 122
Methyl Ethyl Ketone	0.0500	0.0423		mg/L		85	46 - 144
Benzene	0.0500	0.0486		mg/L		97	70 - 120
Carbon tetrachloride	0.0500	0.0534		mg/L		107	59 - 133
Chlorobenzene	0.0500	0.0496		mg/L		99	70 - 120
Chloroform	0.0500	0.0468		mg/L		94	70 - 120
Tetrachloroethene	0.0500	0.0483		mg/L		97	70 - 128
Trichloroethene	0.0500	0.0483		mg/L		97	70 - 125
Vinyl chloride	0.0500	0.0497		mg/L		99	64 - 126

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	104		72 - 124
Dibromofluoromethane	99		75 - 120
Toluene-d8 (Surr)	107		75 - 120

Lab Sample ID: LB 500-519571/1-A
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloroethane	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
1,1-Dichloroethene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Methyl Ethyl Ketone	<0.10		0.10	0.050	mg/L			12/10/19 19:13	20
Benzene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Carbon tetrachloride	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Chlorobenzene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Chloroform	<0.040		0.040	0.020	mg/L			12/10/19 19:13	20
Tetrachloroethene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Trichloroethene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Vinyl chloride	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: LB 500-519571/1-A
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Method Blank
Prep Type: TCLP

Surrogate	LB LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		12/10/19 19:13	20
4-Bromofluorobenzene (Surr)	111		72 - 124		12/10/19 19:13	20
Dibromofluoromethane	94		75 - 120		12/10/19 19:13	20
Toluene-d8 (Surr)	104		75 - 120		12/10/19 19:13	20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-519068/6
Matrix: Solid
Analysis Batch: 519068

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/19 11:34	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/19 11:34	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/19 11:34	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/19 11:34	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/19 11:34	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/19 11:34	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/19 11:34	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/19 11:34	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/19 11:34	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/19 11:34	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/19 11:34	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/19 11:34	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/19 11:34	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/19 11:34	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/19 11:34	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/19 11:34	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/19 11:34	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/19 11:34	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/19 11:34	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/19 11:34	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/19 11:34	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/19 11:34	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/19 11:34	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/19 11:34	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/19 11:34	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/19 11:34	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/19 11:34	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/19 11:34	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/19 11:34	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/19 11:34	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/19 11:34	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/19 11:34	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/19 11:34	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/19 11:34	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/19 11:34	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/19 11:34	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/19 11:34	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134		12/06/19 11:34	1
4-Bromofluorobenzene (Surr)	100		75 - 131		12/06/19 11:34	1
Dibromofluoromethane	84		75 - 126		12/06/19 11:34	1
Toluene-d8 (Surr)	94		75 - 124		12/06/19 11:34	1

Lab Sample ID: LCS 500-519068/4
Matrix: Solid
Analysis Batch: 519068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0435		mg/Kg		87	70 - 128
1,1,1,2-Tetrachloroethane	0.0500	0.0425		mg/Kg		85	70 - 122
1,1,2-Trichloroethane	0.0500	0.0439		mg/Kg		88	70 - 125
1,1-Dichloroethane	0.0500	0.0431		mg/Kg		86	70 - 125
1,2-Dichloroethane	0.0500	0.0430		mg/Kg		86	70 - 130
1,2-Dichloropropane	0.0500	0.0444		mg/Kg		89	70 - 125
1,1-Dichloroethene	0.0500	0.0437		mg/Kg		87	70 - 120
2-Butanone (MEK)	0.0500	0.0373		mg/Kg		75	47 - 138
2-Hexanone	0.0500	0.0377		mg/Kg		75	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0356		mg/Kg		71	50 - 148
Acetone	0.0500	0.0462		mg/Kg		92	40 - 150
Benzene	0.0500	0.0453		mg/Kg		91	70 - 125
Bromodichloromethane	0.0500	0.0420		mg/Kg		84	67 - 129
Bromoform	0.0500	0.0370		mg/Kg		74	68 - 136
Bromomethane	0.0500	0.0426		mg/Kg		85	70 - 130
Carbon disulfide	0.0500	0.0413		mg/Kg		83	70 - 129
Carbon tetrachloride	0.0500	0.0429		mg/Kg		86	75 - 125
Chlorobenzene	0.0500	0.0474		mg/Kg		95	50 - 150
Chloroethane	0.0500	0.0435		mg/Kg		87	75 - 125
Chloroform	0.0500	0.0422		mg/Kg		84	57 - 135
Chloromethane	0.0500	0.0397		mg/Kg		79	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0425		mg/Kg		85	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0446		mg/Kg		89	70 - 125
Dibromochloromethane	0.0500	0.0402		mg/Kg		80	69 - 125
Ethylbenzene	0.0500	0.0461		mg/Kg		92	61 - 136
Methyl tert-butyl ether	0.0500	0.0421		mg/Kg		84	50 - 140
Methylene Chloride	0.0500	0.0419		mg/Kg		84	70 - 126
Styrene	0.0500	0.0446		mg/Kg		89	70 - 125
Tetrachloroethene	0.0500	0.0464		mg/Kg		93	70 - 124
Toluene	0.0500	0.0466		mg/Kg		93	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0430		mg/Kg		86	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0442		mg/Kg		88	70 - 125
Trichloroethene	0.0500	0.0460		mg/Kg		92	70 - 125
Vinyl acetate	0.0500	0.0427		mg/Kg		85	40 - 153
Vinyl chloride	0.0500	0.0426		mg/Kg		85	70 - 125
Xylenes, Total	0.100	0.0914		mg/Kg		91	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	85		75 - 126

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519068/4
Matrix: Solid
Analysis Batch: 519068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	95		75 - 124

Lab Sample ID: MB 500-519216/6
Matrix: Solid
Analysis Batch: 519216

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/Kg			12/06/19 23:06	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/Kg			12/06/19 23:06	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/Kg			12/06/19 23:06	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/Kg			12/06/19 23:06	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/Kg			12/06/19 23:06	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/Kg			12/06/19 23:06	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/Kg			12/06/19 23:06	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/Kg			12/06/19 23:06	1
2-Butanone (MEK)	<0.0050		0.0050	0.0021	mg/Kg			12/06/19 23:06	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/19 23:06	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/19 23:06	1
Acetone	<0.010		0.010	0.0017	mg/Kg			12/06/19 23:06	1
Benzene	<0.00025		0.00025	0.00015	mg/Kg			12/06/19 23:06	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/Kg			12/06/19 23:06	1
Bromoform	<0.0010		0.0010	0.00048	mg/Kg			12/06/19 23:06	1
Bromomethane	<0.0030		0.0030	0.00080	mg/Kg			12/06/19 23:06	1
Carbon disulfide	<0.0020		0.0020	0.00080	mg/Kg			12/06/19 23:06	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/Kg			12/06/19 23:06	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/Kg			12/06/19 23:06	1
Chloroethane	<0.0010		0.0010	0.00050	mg/Kg			12/06/19 23:06	1
Chloroform	<0.0020		0.0020	0.00037	mg/Kg			12/06/19 23:06	1
Chloromethane	<0.0010		0.0010	0.00032	mg/Kg			12/06/19 23:06	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/Kg			12/06/19 23:06	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/Kg			12/06/19 23:06	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/Kg			12/06/19 23:06	1
Ethylbenzene	<0.00025		0.00025	0.00018	mg/Kg			12/06/19 23:06	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/Kg			12/06/19 23:06	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/Kg			12/06/19 23:06	1
Styrene	<0.0010		0.0010	0.00039	mg/Kg			12/06/19 23:06	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/Kg			12/06/19 23:06	1
Toluene	<0.00025		0.00025	0.00015	mg/Kg			12/06/19 23:06	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/Kg			12/06/19 23:06	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/Kg			12/06/19 23:06	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/Kg			12/06/19 23:06	1
Vinyl acetate	<0.0020		0.0020	0.00090	mg/Kg			12/06/19 23:06	1
Vinyl chloride	<0.0010		0.0010	0.00026	mg/Kg			12/06/19 23:06	1
Xylenes, Total	<0.00050		0.00050	0.00022	mg/Kg			12/06/19 23:06	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		12/06/19 23:06	1
4-Bromofluorobenzene (Surr)	107		72 - 124		12/06/19 23:06	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519216/6
Matrix: Solid
Analysis Batch: 519216

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane	100		75 - 120		12/06/19 23:06	1
Toluene-d8 (Surr)	102		75 - 120		12/06/19 23:06	1

Lab Sample ID: LCS 500-519216/4
Matrix: Solid
Analysis Batch: 519216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.0439		mg/Kg		88	62 - 140
1,1,2-Trichloroethane	0.0500	0.0439		mg/Kg		88	71 - 130
1,1-Dichloroethane	0.0500	0.0446		mg/Kg		89	70 - 125
1,2-Dichloroethane	0.0500	0.0444		mg/Kg		89	68 - 127
1,2-Dichloropropane	0.0500	0.0454		mg/Kg		91	67 - 130
1,1-Dichloroethene	0.0500	0.0414		mg/Kg		83	67 - 122
2-Butanone (MEK)	0.0500	0.0454		mg/Kg		91	46 - 144
2-Hexanone	0.0500	0.0433		mg/Kg		87	54 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0441		mg/Kg		88	55 - 139
Acetone	0.0500	0.0420		mg/Kg		84	40 - 143
Benzene	0.0500	0.0429		mg/Kg		86	70 - 120
Bromodichloromethane	0.0500	0.0452		mg/Kg		90	69 - 120
Bromoform	0.0500	0.0425		mg/Kg		85	56 - 132
Bromomethane	0.0500	0.0536		mg/Kg		107	40 - 152
Carbon disulfide	0.0500	0.0422		mg/Kg		84	66 - 120
Carbon tetrachloride	0.0500	0.0462		mg/Kg		92	59 - 133
Chlorobenzene	0.0500	0.0433		mg/Kg		87	70 - 120
Chloroethane	0.0500	0.0489		mg/Kg		98	48 - 136
Chloroform	0.0500	0.0427		mg/Kg		85	70 - 120
Chloromethane	0.0500	0.0625		mg/Kg		125	56 - 152
cis-1,2-Dichloroethene	0.0500	0.0423		mg/Kg		85	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0428		mg/Kg		86	64 - 127
Dibromochloromethane	0.0500	0.0443		mg/Kg		89	68 - 125
Ethylbenzene	0.0500	0.0445		mg/Kg		89	70 - 123
Methyl tert-butyl ether	0.0500	0.0389		mg/Kg		78	55 - 123
Methylene Chloride	0.0500	0.0428		mg/Kg		86	69 - 125
Styrene	0.0500	0.0440		mg/Kg		88	70 - 120
Tetrachloroethene	0.0500	0.0438		mg/Kg		88	70 - 128
Toluene	0.0500	0.0443		mg/Kg		89	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0419		mg/Kg		84	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0425		mg/Kg		85	62 - 128
Trichloroethene	0.0500	0.0441		mg/Kg		88	70 - 125
Vinyl acetate	0.0500	0.0517		mg/Kg		103	43 - 133
Vinyl chloride	0.0500	0.0527		mg/Kg		105	64 - 126
Xylenes, Total	0.100	0.0890		mg/Kg		89	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		75 - 126
4-Bromofluorobenzene (Surr)	102		72 - 124

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519216/4
Matrix: Solid
Analysis Batch: 519216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane	98		75 - 120
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: MB 500-519228/7
Matrix: Solid
Analysis Batch: 519228

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/06/19 23:39	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/06/19 23:39	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/06/19 23:39	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/06/19 23:39	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/06/19 23:39	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/06/19 23:39	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/06/19 23:39	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/06/19 23:39	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/06/19 23:39	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/06/19 23:39	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/06/19 23:39	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/06/19 23:39	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/06/19 23:39	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/06/19 23:39	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/06/19 23:39	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/06/19 23:39	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/06/19 23:39	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/06/19 23:39	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/06/19 23:39	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/06/19 23:39	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/06/19 23:39	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/06/19 23:39	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/06/19 23:39	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/06/19 23:39	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/06/19 23:39	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/06/19 23:39	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/06/19 23:39	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/06/19 23:39	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/06/19 23:39	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/19 23:39	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/06/19 23:39	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/06/19 23:39	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/06/19 23:39	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/06/19 23:39	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/06/19 23:39	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/06/19 23:39	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/06/19 23:39	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	95		70 - 134		12/06/19 23:39	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519228/7
Matrix: Solid
Analysis Batch: 519228

Client Sample ID: Method Blank
Prep Type: Total/NA

<i>Surrogate</i>	<i>MB</i>	<i>MB</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>%Recovery</i>	<i>Qualifier</i>				
<i>4-Bromofluorobenzene (Surr)</i>	99		75 - 131		12/06/19 23:39	1
<i>Dibromofluoromethane</i>	98		75 - 126		12/06/19 23:39	1
<i>Toluene-d8 (Surr)</i>	96		75 - 124		12/06/19 23:39	1

Lab Sample ID: LCS 500-519228/4
Matrix: Solid
Analysis Batch: 519228

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i>
	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>				<i>Limits</i>
1,1,1-Trichloroethane	0.0500	0.0470		mg/Kg		94	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0370		mg/Kg		74	70 - 122
1,1,2-Trichloroethane	0.0500	0.0396		mg/Kg		79	70 - 125
1,1-Dichloroethane	0.0500	0.0423		mg/Kg		85	70 - 125
1,2-Dichloroethane	0.0500	0.0419		mg/Kg		84	70 - 130
1,2-Dichloropropane	0.0500	0.0401		mg/Kg		80	70 - 125
1,1-Dichloroethene	0.0500	0.0434		mg/Kg		87	70 - 120
2-Butanone (MEK)	0.0500	0.0272		mg/Kg		54	47 - 138
2-Hexanone	0.0500	0.0283		mg/Kg		57	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0296		mg/Kg		59	50 - 148
Acetone	0.0500	0.0323		mg/Kg		65	40 - 150
Benzene	0.0500	0.0433		mg/Kg		87	70 - 125
Bromodichloromethane	0.0500	0.0436		mg/Kg		87	67 - 129
Bromoform	0.0500	0.0431		mg/Kg		86	68 - 136
Bromomethane	0.0500	0.0583		mg/Kg		117	70 - 130
Carbon disulfide	0.0500	0.0423		mg/Kg		85	70 - 129
Carbon tetrachloride	0.0500	0.0470		mg/Kg		94	75 - 125
Chlorobenzene	0.0500	0.0431		mg/Kg		86	50 - 150
Chloroethane	0.0500	0.0580		mg/Kg		116	75 - 125
Chloroform	0.0500	0.0446		mg/Kg		89	57 - 135
Chloromethane	0.0500	0.0518		mg/Kg		104	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0461		mg/Kg		92	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0384		mg/Kg		77	70 - 125
Dibromochloromethane	0.0500	0.0429		mg/Kg		86	69 - 125
Ethylbenzene	0.0500	0.0429		mg/Kg		86	61 - 136
Methyl tert-butyl ether	0.0500	0.0432		mg/Kg		86	50 - 140
Methylene Chloride	0.0500	0.0442		mg/Kg		88	70 - 126
Styrene	0.0500	0.0425		mg/Kg		85	70 - 125
Tetrachloroethene	0.0500	0.0430		mg/Kg		86	70 - 124
Toluene	0.0500	0.0414		mg/Kg		83	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0450		mg/Kg		90	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0372		mg/Kg		74	70 - 125
Trichloroethene	0.0500	0.0465		mg/Kg		93	70 - 125
Vinyl acetate	0.0500	0.0414		mg/Kg		83	40 - 153
Vinyl chloride	0.0500	0.0492		mg/Kg		98	70 - 125
Xylenes, Total	0.100	0.0855		mg/Kg		85	53 - 147

<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>1,2-Dichloroethane-d4 (Surr)</i>	87		70 - 134

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519228/4
Matrix: Solid
Analysis Batch: 519228

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	92		75 - 131
Dibromofluoromethane	97		75 - 126
Toluene-d8 (Surr)	96		75 - 124

Lab Sample ID: LCSD 500-519228/5
Matrix: Solid
Analysis Batch: 519228

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
1,1,1-Trichloroethane	0.0500	0.0460		mg/Kg		92	70 - 128	2	30
1,1,2,2-Tetrachloroethane	0.0500	0.0358		mg/Kg		72	70 - 122	3	30
1,1,2-Trichloroethane	0.0500	0.0380		mg/Kg		76	70 - 125	4	30
1,1-Dichloroethane	0.0500	0.0418		mg/Kg		84	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0411		mg/Kg		82	70 - 130	2	30
1,2-Dichloropropane	0.0500	0.0388		mg/Kg		78	70 - 125	3	30
1,1-Dichloroethene	0.0500	0.0427		mg/Kg		85	70 - 120	2	30
2-Butanone (MEK)	0.0500	0.0289		mg/Kg		58	47 - 138	6	30
2-Hexanone	0.0500	0.0296		mg/Kg		59	48 - 146	4	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0307		mg/Kg		61	50 - 148	4	30
Acetone	0.0500	0.0316		mg/Kg		63	40 - 150	2	30
Benzene	0.0500	0.0422		mg/Kg		84	70 - 125	2	30
Bromodichloromethane	0.0500	0.0426		mg/Kg		85	67 - 129	2	30
Bromoform	0.0500	0.0425		mg/Kg		85	68 - 136	1	30
Bromomethane	0.0500	0.0569		mg/Kg		114	70 - 130	2	30
Carbon disulfide	0.0500	0.0420		mg/Kg		84	70 - 129	1	30
Carbon tetrachloride	0.0500	0.0457		mg/Kg		91	75 - 125	3	30
Chlorobenzene	0.0500	0.0426		mg/Kg		85	50 - 150	1	30
Chloroethane	0.0500	0.0555		mg/Kg		111	75 - 125	4	30
Chloroform	0.0500	0.0441		mg/Kg		88	57 - 135	1	30
Chloromethane	0.0500	0.0506		mg/Kg		101	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0452		mg/Kg		90	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0364		mg/Kg		73	70 - 125	5	30
Dibromochloromethane	0.0500	0.0410		mg/Kg		82	69 - 125	5	30
Ethylbenzene	0.0500	0.0416		mg/Kg		83	61 - 136	3	30
Methyl tert-butyl ether	0.0500	0.0429		mg/Kg		86	50 - 140	1	30
Methylene Chloride	0.0500	0.0442		mg/Kg		88	70 - 126	0	30
Styrene	0.0500	0.0414		mg/Kg		83	70 - 125	3	30
Tetrachloroethene	0.0500	0.0422		mg/Kg		84	70 - 124	2	30
Toluene	0.0500	0.0404		mg/Kg		81	70 - 125	3	30
trans-1,2-Dichloroethene	0.0500	0.0453		mg/Kg		91	70 - 125	1	30
trans-1,3-Dichloropropene	0.0500	0.0367		mg/Kg		73	70 - 125	1	30
Trichloroethene	0.0500	0.0453		mg/Kg		91	70 - 125	3	30
Vinyl acetate	0.0500	0.0408		mg/Kg		82	40 - 153	1	30
Vinyl chloride	0.0500	0.0487		mg/Kg		97	70 - 125	1	30
Xylenes, Total	0.100	0.0837		mg/Kg		84	53 - 147	2	30

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		70 - 134

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-519228/5
Matrix: Solid
Analysis Batch: 519228

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		75 - 131
Dibromofluoromethane	98		75 - 126
Toluene-d8 (Surr)	97		75 - 124

Lab Sample ID: MB 500-519527/7
Matrix: Solid
Analysis Batch: 519527

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/Kg			12/09/19 13:07	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/Kg			12/09/19 13:07	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/Kg			12/09/19 13:07	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/Kg			12/09/19 13:07	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/Kg			12/09/19 13:07	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/Kg			12/09/19 13:07	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/Kg			12/09/19 13:07	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/Kg			12/09/19 13:07	1
2-Butanone (MEK)	<0.0050		0.0050	0.0021	mg/Kg			12/09/19 13:07	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/09/19 13:07	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0022	mg/Kg			12/09/19 13:07	1
Acetone	<0.010		0.010	0.0017	mg/Kg			12/09/19 13:07	1
Benzene	<0.00025		0.00025	0.00015	mg/Kg			12/09/19 13:07	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/Kg			12/09/19 13:07	1
Bromoform	<0.0010		0.0010	0.00048	mg/Kg			12/09/19 13:07	1
Bromomethane	<0.0030		0.0030	0.00080	mg/Kg			12/09/19 13:07	1
Carbon disulfide	<0.0020		0.0020	0.00080	mg/Kg			12/09/19 13:07	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/Kg			12/09/19 13:07	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/Kg			12/09/19 13:07	1
Chloroethane	<0.0010		0.0010	0.00050	mg/Kg			12/09/19 13:07	1
Chloroform	0.000452	J	0.0020	0.00037	mg/Kg			12/09/19 13:07	1
Chloromethane	<0.0010		0.0010	0.00032	mg/Kg			12/09/19 13:07	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/Kg			12/09/19 13:07	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/Kg			12/09/19 13:07	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/Kg			12/09/19 13:07	1
Ethylbenzene	<0.00025		0.00025	0.00018	mg/Kg			12/09/19 13:07	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/Kg			12/09/19 13:07	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/Kg			12/09/19 13:07	1
Styrene	0.000507	J	0.0010	0.00039	mg/Kg			12/09/19 13:07	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/Kg			12/09/19 13:07	1
Toluene	<0.00025		0.00025	0.00015	mg/Kg			12/09/19 13:07	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/Kg			12/09/19 13:07	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/Kg			12/09/19 13:07	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/Kg			12/09/19 13:07	1
Vinyl acetate	<0.0020		0.0020	0.00090	mg/Kg			12/09/19 13:07	1
Vinyl chloride	<0.0010		0.0010	0.00026	mg/Kg			12/09/19 13:07	1
Xylenes, Total	<0.00050		0.00050	0.00022	mg/Kg			12/09/19 13:07	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519527/7
Matrix: Solid
Analysis Batch: 519527

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	113		75 - 126		12/09/19 13:07	1
4-Bromofluorobenzene (Surr)	105		72 - 124		12/09/19 13:07	1
Dibromofluoromethane	106		75 - 120		12/09/19 13:07	1
Toluene-d8 (Surr)	102		75 - 120		12/09/19 13:07	1

Lab Sample ID: LCS 500-519527/4
Matrix: Solid
Analysis Batch: 519527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	0.0500	0.0469		mg/Kg		94	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0478		mg/Kg		96	62 - 140
1,1,2-Trichloroethane	0.0500	0.0485		mg/Kg		97	71 - 130
1,1-Dichloroethane	0.0500	0.0387		mg/Kg		77	70 - 125
1,2-Dichloroethane	0.0500	0.0442		mg/Kg		88	68 - 127
1,2-Dichloropropane	0.0500	0.0394		mg/Kg		79	67 - 130
1,1-Dichloroethene	0.0500	0.0444		mg/Kg		89	67 - 122
2-Butanone (MEK)	0.0500	0.0312		mg/Kg		62	46 - 144
2-Hexanone	0.0500	0.0363		mg/Kg		73	54 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0359		mg/Kg		72	55 - 139
Acetone	0.0500	0.0341		mg/Kg		68	40 - 143
Benzene	0.0500	0.0467		mg/Kg		93	70 - 120
Bromodichloromethane	0.0500	0.0482		mg/Kg		96	69 - 120
Bromoform	0.0500	0.0483		mg/Kg		97	56 - 132
Bromomethane	0.0500	0.0475		mg/Kg		95	40 - 152
Carbon disulfide	0.0500	0.0449		mg/Kg		90	66 - 120
Carbon tetrachloride	0.0500	0.0454		mg/Kg		91	59 - 133
Chlorobenzene	0.0500	0.0436		mg/Kg		87	70 - 120
Chloroethane	0.0500	0.0399		mg/Kg		80	48 - 136
Chloroform	0.0500	0.0459		mg/Kg		92	70 - 120
Chloromethane	0.0500	0.0305		mg/Kg		61	56 - 152
cis-1,2-Dichloroethene	0.0500	0.0440		mg/Kg		88	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0489		mg/Kg		98	64 - 127
Dibromochloromethane	0.0500	0.0479		mg/Kg		96	68 - 125
Ethylbenzene	0.0500	0.0473		mg/Kg		95	70 - 123
Methyl tert-butyl ether	0.0500	0.0556		mg/Kg		111	55 - 123
Methylene Chloride	0.0500	0.0433		mg/Kg		87	69 - 125
Styrene	0.0500	0.0439		mg/Kg		88	70 - 120
Tetrachloroethene	0.0500	0.0463		mg/Kg		93	70 - 128
Toluene	0.0500	0.0477		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0438		mg/Kg		88	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0555		mg/Kg		111	62 - 128
Trichloroethene	0.0500	0.0410		mg/Kg		82	70 - 125
Vinyl acetate	0.0500	0.0384		mg/Kg		77	43 - 133
Vinyl chloride	0.0500	0.0477		mg/Kg		95	64 - 126
Xylenes, Total	0.100	0.101		mg/Kg		101	70 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519527/4
Matrix: Solid
Analysis Batch: 519527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	110		75 - 126
4-Bromofluorobenzene (Surr)	101		72 - 124
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	104		75 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518838/1-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518838

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/05/19 07:47	12/06/19 00:20	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-518838/1-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/05/19 07:47	12/06/19 00:20	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/05/19 07:47	12/06/19 00:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	137		31 - 166	12/05/19 07:47	12/06/19 00:20	1
Phenol-d5	133		30 - 153	12/05/19 07:47	12/06/19 00:20	1
Nitrobenzene-d5	117		37 - 147	12/05/19 07:47	12/06/19 00:20	1
2-Fluorobiphenyl	94		43 - 145	12/05/19 07:47	12/06/19 00:20	1
2,4,6-Tribromophenol	55		31 - 143	12/05/19 07:47	12/06/19 00:20	1
Terphenyl-d14	98		42 - 157	12/05/19 07:47	12/06/19 00:20	1

Lab Sample ID: LCS 500-518838/2-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	1.33	1.96	*	mg/Kg		147	56 - 122
Bis(2-chloroethyl)ether	1.33	1.71	*	mg/Kg		129	55 - 111
1,3-Dichlorobenzene	1.33	1.27		mg/Kg		95	65 - 124
1,4-Dichlorobenzene	1.33	1.29		mg/Kg		97	61 - 110
1,2-Dichlorobenzene	1.33	1.28		mg/Kg		96	62 - 110
2-Methylphenol	1.33	1.67	*	mg/Kg		125	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	2.32	*	mg/Kg		174	40 - 124

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518838/2-A

Matrix: Solid

Analysis Batch: 519028

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 518838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodi-n-propylamine	1.33	1.92	*	mg/Kg		144	56 - 118
Hexachloroethane	1.33	1.52		mg/Kg		114	60 - 114
2-Chlorophenol	1.33	1.52	*	mg/Kg		114	64 - 110
Nitrobenzene	1.33	1.85	*	mg/Kg		139	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.78	*	mg/Kg		133	60 - 112
1,2,4-Trichlorobenzene	1.33	1.20		mg/Kg		90	66 - 117
Isophorone	1.33	1.85	*	mg/Kg		139	55 - 110
2,4-Dimethylphenol	1.33	1.37		mg/Kg		103	60 - 110
Hexachlorobutadiene	1.33	1.12		mg/Kg		84	56 - 120
Naphthalene	1.33	1.39		mg/Kg		104	63 - 110
2,4-Dichlorophenol	1.33	1.27		mg/Kg		95	58 - 120
4-Chloroaniline	1.33	1.38		mg/Kg		104	30 - 150
2,4,6-Trichlorophenol	1.33	1.12		mg/Kg		84	57 - 120
2,4,5-Trichlorophenol	1.33	1.15		mg/Kg		86	50 - 120
Hexachlorocyclopentadiene	1.33	0.207	J	mg/Kg		16	10 - 133
2-Methylnaphthalene	1.33	1.31		mg/Kg		98	69 - 112
2-Nitroaniline	1.33	1.97	*	mg/Kg		148	57 - 124
2-Chloronaphthalene	1.33	1.35		mg/Kg		102	69 - 114
4-Chloro-3-methylphenol	1.33	1.51		mg/Kg		113	65 - 122
2,6-Dinitrotoluene	1.33	1.41		mg/Kg		105	70 - 123
2-Nitrophenol	1.33	1.35		mg/Kg		101	60 - 120
3-Nitroaniline	1.33	1.39		mg/Kg		104	40 - 122
Dimethyl phthalate	1.33	1.37		mg/Kg		102	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		14	10 - 100
Acenaphthylene	1.33	1.40		mg/Kg		105	68 - 120
2,4-Dinitrotoluene	1.33	1.46		mg/Kg		110	69 - 124
Acenaphthene	1.33	1.38		mg/Kg		104	65 - 124
Dibenzofuran	1.33	1.35		mg/Kg		101	66 - 115
4-Nitrophenol	2.67	2.54		mg/Kg		95	30 - 122
Fluorene	1.33	1.38		mg/Kg		103	62 - 120
4-Nitroaniline	1.33	1.41		mg/Kg		106	60 - 160
4-Bromophenyl phenyl ether	1.33	1.10		mg/Kg		82	68 - 118
Hexachlorobenzene	1.33	1.06		mg/Kg		80	63 - 124
Diethyl phthalate	1.33	1.41		mg/Kg		106	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.19		mg/Kg		90	62 - 119
Pentachlorophenol	2.67	1.12		mg/Kg		42	13 - 112
N-Nitrosodiphenylamine	1.33	1.31		mg/Kg		98	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.810		mg/Kg		30	10 - 110
Phenanthrene	1.33	1.32		mg/Kg		99	62 - 120
Anthracene	1.33	1.33		mg/Kg		100	70 - 114
Carbazole	1.33	1.43		mg/Kg		107	65 - 142
Di-n-butyl phthalate	1.33	1.54		mg/Kg		115	65 - 120
Fluoranthene	1.33	1.28		mg/Kg		96	62 - 120
Pyrene	1.33	1.51		mg/Kg		113	61 - 128
Butyl benzyl phthalate	1.33	1.79	*	mg/Kg		134	71 - 129
Benzo[a]anthracene	1.33	1.29		mg/Kg		97	67 - 122
Chrysene	1.33	1.36		mg/Kg		102	63 - 120
3,3'-Dichlorobenzidine	1.33	0.945		mg/Kg		71	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.80	*	mg/Kg		135	72 - 131

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-518838/2-A
Matrix: Solid
Analysis Batch: 519028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	1.33	1.54		mg/Kg		116	68 - 134
Benzo[b]fluoranthene	1.33	1.30		mg/Kg		98	69 - 129
Benzo[k]fluoranthene	1.33	1.29		mg/Kg		97	68 - 127
Benzo[a]pyrene	1.33	1.38		mg/Kg		104	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.22		mg/Kg		92	68 - 130
Dibenz(a,h)anthracene	1.33	1.19		mg/Kg		89	64 - 131
Benzo[g,h,i]perylene	1.33	1.30		mg/Kg		97	72 - 131
3 & 4 Methylphenol	1.33	1.59		mg/Kg		119	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	138		31 - 166
Phenol-d5	141		30 - 153
Nitrobenzene-d5	116		37 - 147
2-Fluorobiphenyl	91		43 - 145
2,4,6-Tribromophenol	68		31 - 143
Terphenyl-d14	92		42 - 157

Lab Sample ID: MB 500-519101/1-A
Matrix: Solid
Analysis Batch: 519246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0020		0.0020	0.0020	mg/L		12/06/19 08:39	12/07/19 00:28	1
Cresol, o-	<0.0020		0.0020	0.0020	mg/L		12/06/19 08:39	12/07/19 00:28	1
Hexachloroethane	<0.0050		0.0050	0.0050	mg/L		12/06/19 08:39	12/07/19 00:28	1
Nitrobenzene	<0.0010		0.0010	0.0010	mg/L		12/06/19 08:39	12/07/19 00:28	1
Pyridine	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 00:28	1
Hexachloro-1,3-butadiene	<0.0050		0.0050	0.0050	mg/L		12/06/19 08:39	12/07/19 00:28	1
2,4,6-Trichlorophenol	<0.0050		0.0050	0.0050	mg/L		12/06/19 08:39	12/07/19 00:28	1
2,4,5-Trichlorophenol	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/07/19 00:28	1
2,4-Dinitrotoluene	<0.0010		0.0010	0.0010	mg/L		12/06/19 08:39	12/07/19 00:28	1
Hexachlorobenzene	<0.00050		0.00050	0.00050	mg/L		12/06/19 08:39	12/07/19 00:28	1
Pentachlorophenol	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/07/19 00:28	1
m & p - Cresol	<0.0020		0.0020	0.0020	mg/L		12/06/19 08:39	12/07/19 00:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	62		27 - 110	12/06/19 08:39	12/07/19 00:28	1
Phenol-d5	39		20 - 100	12/06/19 08:39	12/07/19 00:28	1
Nitrobenzene-d5	80		36 - 120	12/06/19 08:39	12/07/19 00:28	1
2-Fluorobiphenyl	94		34 - 110	12/06/19 08:39	12/07/19 00:28	1
2,4,6-Tribromophenol	74		40 - 145	12/06/19 08:39	12/07/19 00:28	1
Terphenyl-d14	120		40 - 145	12/06/19 08:39	12/07/19 00:28	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519101/2-A
Matrix: Solid
Analysis Batch: 519246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
								%Rec.
1,4-Dichlorobenzene	0.0400	0.0303		mg/L		76	23 - 110	
Cresol, o-	0.0400	0.0377		mg/L		94	53 - 115	
Hexachloroethane	0.0400	0.0263		mg/L		66	20 - 100	
Nitrobenzene	0.0400	0.0378		mg/L		94	54 - 121	
Pyridine	0.0800	0.0384		mg/L		48	15 - 110	
Hexachloro-1,3-butadiene	0.0400	0.0262		mg/L		66	20 - 100	
2,4,6-Trichlorophenol	0.0400	0.0494	*	mg/L		123	62 - 121	
2,4,5-Trichlorophenol	0.0400	0.0505	*	mg/L		126	63 - 124	
2,4-Dinitrotoluene	0.0400	0.0466		mg/L		116	63 - 129	
Hexachlorobenzene	0.0400	0.0407		mg/L		102	61 - 126	
Pentachlorophenol	0.0800	0.0618		mg/L		77	42 - 148	
m & p - Cresol	0.0400	0.0349		mg/L		87	50 - 116	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	65		27 - 110
Phenol-d5	44		20 - 100
Nitrobenzene-d5	85		36 - 120
2-Fluorobiphenyl	109		34 - 110
2,4,6-Tribromophenol	113		40 - 145
Terphenyl-d14	120		40 - 145

Lab Sample ID: MB 500-519281/1-A
Matrix: Solid
Analysis Batch: 519291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519281

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/06/19 18:03	12/07/19 12:59	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519281/1-A
Matrix: Solid
Analysis Batch: 519291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519281

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/06/19 18:03	12/07/19 12:59	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/06/19 18:03	12/07/19 12:59	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	81		31 - 166	12/06/19 18:03	12/07/19 12:59	1
Phenol-d5	73		30 - 153	12/06/19 18:03	12/07/19 12:59	1
Nitrobenzene-d5	89		37 - 147	12/06/19 18:03	12/07/19 12:59	1
2-Fluorobiphenyl	99		43 - 145	12/06/19 18:03	12/07/19 12:59	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519281/1-A
Matrix: Solid
Analysis Batch: 519291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519281

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol	50		31 - 143	12/06/19 18:03	12/07/19 12:59	1
Terphenyl-d14	103		42 - 157	12/06/19 18:03	12/07/19 12:59	1

Lab Sample ID: LCS 500-519281/2-A
Matrix: Solid
Analysis Batch: 519291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.07		mg/Kg		80	56 - 122
Bis(2-chloroethyl)ether	1.33	1.37		mg/Kg		103	55 - 111
1,3-Dichlorobenzene	1.33	1.27		mg/Kg		95	65 - 124
1,4-Dichlorobenzene	1.33	1.23		mg/Kg		93	61 - 110
1,2-Dichlorobenzene	1.33	1.30		mg/Kg		97	62 - 110
2-Methylphenol	1.33	1.19		mg/Kg		89	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.794		mg/Kg		60	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.31		mg/Kg		98	56 - 118
Hexachloroethane	1.33	1.28		mg/Kg		96	60 - 114
2-Chlorophenol	1.33	1.32		mg/Kg		99	64 - 110
Nitrobenzene	1.33	1.32		mg/Kg		99	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.42		mg/Kg		106	60 - 112
1,2,4-Trichlorobenzene	1.33	1.26		mg/Kg		94	66 - 117
Isophorone	1.33	1.31		mg/Kg		98	55 - 110
2,4-Dimethylphenol	1.33	1.25		mg/Kg		94	60 - 110
Hexachlorobutadiene	1.33	1.11		mg/Kg		83	56 - 120
Naphthalene	1.33	1.32		mg/Kg		99	63 - 110
2,4-Dichlorophenol	1.33	1.26		mg/Kg		95	58 - 120
4-Chloroaniline	1.33	1.22		mg/Kg		92	30 - 150
2,4,6-Trichlorophenol	1.33	1.07		mg/Kg		80	57 - 120
2,4,5-Trichlorophenol	1.33	1.12		mg/Kg		84	50 - 120
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		5	10 - 133
2-Methylnaphthalene	1.33	1.35		mg/Kg		101	69 - 112
2-Nitroaniline	1.33	1.22		mg/Kg		92	57 - 124
2-Chloronaphthalene	1.33	1.29		mg/Kg		97	69 - 114
4-Chloro-3-methylphenol	1.33	1.27		mg/Kg		95	65 - 122
2,6-Dinitrotoluene	1.33	1.42		mg/Kg		106	70 - 123
2-Nitrophenol	1.33	1.31		mg/Kg		98	60 - 120
3-Nitroaniline	1.33	1.09		mg/Kg		82	40 - 122
Dimethyl phthalate	1.33	1.29		mg/Kg		97	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		10	10 - 100
Acenaphthylene	1.33	1.38		mg/Kg		104	68 - 120
2,4-Dinitrotoluene	1.33	1.41		mg/Kg		106	69 - 124
Acenaphthene	1.33	1.32		mg/Kg		99	65 - 124
Dibenzofuran	1.33	1.37		mg/Kg		103	66 - 115
4-Nitrophenol	2.67	2.19		mg/Kg		82	30 - 122
Fluorene	1.33	1.37		mg/Kg		102	62 - 120
4-Nitroaniline	1.33	1.19		mg/Kg		89	60 - 160
4-Bromophenyl phenyl ether	1.33	1.20		mg/Kg		90	68 - 118
Hexachlorobenzene	1.33	1.18		mg/Kg		88	63 - 124

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519281/2-A

Matrix: Solid

Analysis Batch: 519291

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 519281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diethyl phthalate	1.33	1.35		mg/Kg		101	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.23		mg/Kg		92	62 - 119
Pentachlorophenol	2.67	0.978		mg/Kg		37	13 - 112
N-Nitrosodiphenylamine	1.33	1.50		mg/Kg		112	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.779		mg/Kg		29	10 - 110
Phenanthrene	1.33	1.36		mg/Kg		102	62 - 120
Anthracene	1.33	1.41		mg/Kg		106	70 - 114
Carbazole	1.33	1.64		mg/Kg		123	65 - 142
Di-n-butyl phthalate	1.33	1.51		mg/Kg		113	65 - 120
Fluoranthene	1.33	1.28		mg/Kg		96	62 - 120
Pyrene	1.33	1.45		mg/Kg		109	61 - 128
Butyl benzyl phthalate	1.33	1.64		mg/Kg		123	71 - 129
Benzo[a]anthracene	1.33	1.31		mg/Kg		98	67 - 122
Chrysene	1.33	1.32		mg/Kg		99	63 - 120
3,3'-Dichlorobenzidine	1.33	1.04		mg/Kg		78	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.68		mg/Kg		126	72 - 131
Di-n-octyl phthalate	1.33	1.45		mg/Kg		109	68 - 134
Benzo[b]fluoranthene	1.33	1.38		mg/Kg		103	69 - 129
Benzo[k]fluoranthene	1.33	1.33		mg/Kg		99	68 - 127
Benzo[a]pyrene	1.33	1.38		mg/Kg		104	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.57		mg/Kg		118	68 - 130
Dibenz(a,h)anthracene	1.33	1.43		mg/Kg		107	64 - 131
Benzo[g,h,i]perylene	1.33	1.38		mg/Kg		103	72 - 131
3 & 4 Methylphenol	1.33	1.33		mg/Kg		100	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	87		31 - 166
Phenol-d5	80		30 - 153
Nitrobenzene-d5	94		37 - 147
2-Fluorobiphenyl	99		43 - 145
2,4,6-Tribromophenol	56		31 - 143
Terphenyl-d14	95		42 - 157

Lab Sample ID: 500-174194-1 MS

Matrix: Solid

Analysis Batch: 519291

Client Sample ID: 2615V2-AI-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 519281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20	F1 F2	1.62	1.18		mg/Kg	☼	73	56 - 122
Bis(2-chloroethyl)ether	<0.20	F1 F2	1.62	1.64		mg/Kg	☼	102	55 - 111
1,3-Dichlorobenzene	<0.20	F1 F2	1.62	1.34		mg/Kg	☼	83	60 - 110
1,4-Dichlorobenzene	<0.20	F1 F2	1.62	1.33		mg/Kg	☼	82	61 - 110
1,2-Dichlorobenzene	<0.20	F1 F2	1.62	1.37		mg/Kg	☼	85	62 - 110
2-Methylphenol	<0.20	F1 F2	1.62	1.55		mg/Kg	☼	96	60 - 120
2,2'-oxybis[1-chloropropane]	<0.20	F1 F2	1.62	0.851		mg/Kg	☼	53	40 - 124
N-Nitrosodi-n-propylamine	<0.081	F1 F2	1.62	1.41		mg/Kg	☼	88	56 - 118
Hexachloroethane	<0.20	F1 F2	1.62	0.660	F1	mg/Kg	☼	41	60 - 114
2-Chlorophenol	<0.20	F1 F2	1.62	1.51		mg/Kg	☼	94	64 - 110

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174194-1 MS

Matrix: Solid

Analysis Batch: 519291

Client Sample ID: 2615V2-AI-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 519281

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Nitrobenzene	<0.040	F1 F2	1.62	1.42		mg/Kg	☼	88		60 - 116
Bis(2-chloroethoxy)methane	<0.20	F1 F2	1.62	1.57		mg/Kg	☼	97		60 - 112
1,2,4-Trichlorobenzene	<0.20	F1 F2	1.62	1.35		mg/Kg	☼	84		66 - 117
Isophorone	<0.20	F1 F2	1.62	1.50		mg/Kg	☼	93		55 - 110
2,4-Dimethylphenol	<0.40	F1 F2	1.62	1.55		mg/Kg	☼	96		60 - 110
Hexachlorobutadiene	<0.20	F1 F2	1.62	1.20		mg/Kg	☼	74		56 - 120
Naphthalene	<0.040	F1 F2	1.62	1.46		mg/Kg	☼	91		63 - 110
2,4-Dichlorophenol	<0.40	F1 F2	1.62	1.48		mg/Kg	☼	92		58 - 120
4-Chloroaniline	<0.81	F1 F2	1.62	1.13		mg/Kg	☼	70		30 - 150
2,4,6-Trichlorophenol	<0.40	F1 F2	1.62	1.39		mg/Kg	☼	86		57 - 120
2,4,5-Trichlorophenol	<0.40	F1 F2	1.62	1.43		mg/Kg	☼	89		50 - 120
Hexachlorocyclopentadiene	<0.81	F1 *	1.62	<0.81	F1	mg/Kg	☼	0		10 - 133
2-Methylnaphthalene	<0.081	F1 F2	1.62	1.48		mg/Kg	☼	92		69 - 112
2-Nitroaniline	<0.20	F1 F2	1.62	1.43		mg/Kg	☼	88		57 - 124
2-Chloronaphthalene	<0.20	F1 F2	1.62	1.55		mg/Kg	☼	96		69 - 114
4-Chloro-3-methylphenol	<0.40	F1 F2	1.62	1.50		mg/Kg	☼	93		65 - 122
2,6-Dinitrotoluene	<0.20	F1 F2	1.62	1.54		mg/Kg	☼	95		70 - 123
2-Nitrophenol	<0.40	F1 F2	1.62	1.34		mg/Kg	☼	83		60 - 120
3-Nitroaniline	<0.40	F2	1.62	1.53		mg/Kg	☼	95		40 - 122
Dimethyl phthalate	<0.20	F1 F2	1.62	1.60		mg/Kg	☼	99		69 - 116
2,4-Dinitrophenol	<0.81	F1	3.23	<0.81	F1	mg/Kg	☼	0		10 - 100
Acenaphthylene	<0.040	F1 F2	1.62	1.58		mg/Kg	☼	98		68 - 120
2,4-Dinitrotoluene	<0.20	F1 F2	1.62	1.38		mg/Kg	☼	85		69 - 124
Acenaphthene	<0.040	F1 F2	1.62	1.56		mg/Kg	☼	96		65 - 124
Dibenzofuran	<0.20	F1 F2	1.62	1.56		mg/Kg	☼	97		66 - 115
4-Nitrophenol	<0.81	F1	3.23	<0.81	F1	mg/Kg	☼	0		30 - 122
Fluorene	<0.040	F1 F2	1.62	1.58		mg/Kg	☼	98		62 - 120
4-Nitroaniline	<0.40	F1 F2	1.62	1.53		mg/Kg	☼	95		60 - 160
4-Bromophenyl phenyl ether	<0.20	F1 F2	1.62	1.34		mg/Kg	☼	83		68 - 118
Hexachlorobenzene	<0.081	F1 F2	1.62	1.24		mg/Kg	☼	77		63 - 124
Diethyl phthalate	<0.20	F1 F2	1.62	1.57		mg/Kg	☼	98		58 - 120
4-Chlorophenyl phenyl ether	<0.20	F1 F2	1.62	1.32		mg/Kg	☼	82		62 - 119
Pentachlorophenol	<0.81	F1	3.23	1.49		mg/Kg	☼	46		13 - 112
N-Nitrosodiphenylamine	<0.20	F1 F2	1.62	1.94	F1	mg/Kg	☼	120		65 - 112
4,6-Dinitro-2-methylphenol	<0.81	F1	3.23	<0.81	F1	mg/Kg	☼	0		10 - 110
Phenanthrene	0.12	F1 F2	1.62	1.76		mg/Kg	☼	102		62 - 120
Anthracene	<0.040	F1 F2	1.62	1.58		mg/Kg	☼	98		70 - 114
Carbazole	<0.20	F1 F2	1.62	1.87		mg/Kg	☼	116		65 - 142
Di-n-butyl phthalate	<0.20	F1 F2	1.62	1.72		mg/Kg	☼	106		65 - 120
Fluoranthene	<0.040	F1 F2	1.62	1.37		mg/Kg	☼	85		62 - 120
Pyrene	<0.040	F1 F2	1.62	1.85		mg/Kg	☼	114		61 - 128
Butyl benzyl phthalate	<0.20	F1 F2	1.62	1.94		mg/Kg	☼	120		71 - 129
Benzo[a]anthracene	<0.040	F1 F2	1.62	1.62		mg/Kg	☼	100		67 - 122
Chrysene	<0.040	F1 F2	1.62	1.58		mg/Kg	☼	98		63 - 120
3,3'-Dichlorobenzidine	<0.20	F1 F2	1.62	0.588		mg/Kg	☼	36		35 - 128
Bis(2-ethylhexyl) phthalate	<0.20	F1 F2	1.62	2.00		mg/Kg	☼	124		72 - 131
Di-n-octyl phthalate	<0.20	F1 F2	1.62	1.57		mg/Kg	☼	97		68 - 134
Benzo[b]fluoranthene	<0.040	F1 F2	1.62	1.47		mg/Kg	☼	91		69 - 129
Benzo[k]fluoranthene	<0.040	F1 F2	1.62	2.06		mg/Kg	☼	127		68 - 127

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174194-1 MS

Matrix: Solid

Analysis Batch: 519291

Client Sample ID: 2615V2-AI-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 519281

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Benzo[a]pyrene	<0.040	F1 F2	1.62	1.70		mg/Kg	☼	105		65 - 133
Indeno[1,2,3-cd]pyrene	<0.040	F1 F2	1.62	1.20		mg/Kg	☼	75		68 - 130
Dibenz(a,h)anthracene	<0.040	F1 F2	1.62	1.20		mg/Kg	☼	75		64 - 131
Benzo[g,h,i]perylene	<0.040	F1 F2	1.62	0.895	F1	mg/Kg	☼	55		72 - 131
3 & 4 Methylphenol	<0.20	F1 F2	1.62	1.37		mg/Kg	☼	85		57 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	78		31 - 166
Phenol-d5	74		30 - 153
Nitrobenzene-d5	86		37 - 147
2-Fluorobiphenyl	97		43 - 145
2,4,6-Tribromophenol	57		31 - 143
Terphenyl-d14	93		42 - 157

Lab Sample ID: 500-174194-1 MSD

Matrix: Solid

Analysis Batch: 519291

Client Sample ID: 2615V2-AI-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 519281

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier		Result	Qualifier						Limit	
Phenol	<0.20	F1 F2	1.62	0.507	F1 F2	mg/Kg	☼	31		56 - 122	80	30
Bis(2-chloroethyl)ether	<0.20	F1 F2	1.62	0.683	F1 F2	mg/Kg	☼	42		55 - 111	83	30
1,3-Dichlorobenzene	<0.20	F1 F2	1.62	0.608	F1 F2	mg/Kg	☼	38		60 - 110	75	30
1,4-Dichlorobenzene	<0.20	F1 F2	1.62	0.625	F1 F2	mg/Kg	☼	39		61 - 110	72	30
1,2-Dichlorobenzene	<0.20	F1 F2	1.62	0.643	F1 F2	mg/Kg	☼	40		62 - 110	73	30
2-Methylphenol	<0.20	F1 F2	1.62	0.569	F1 F2	mg/Kg	☼	35		60 - 120	93	30
2,2'-oxybis[1-chloropropane]	<0.20	F1 F2	1.62	0.357	F1 F2	mg/Kg	☼	22		40 - 124	82	30
N-Nitrosodi-n-propylamine	<0.081	F1 F2	1.62	0.655	F1 F2	mg/Kg	☼	40		56 - 118	73	30
Hexachloroethane	<0.20	F1 F2	1.62	0.289	F1 F2	mg/Kg	☼	18		60 - 114	78	30
2-Chlorophenol	<0.20	F1 F2	1.62	0.637	F1 F2	mg/Kg	☼	39		64 - 110	81	30
Nitrobenzene	<0.040	F1 F2	1.62	0.608	F1 F2	mg/Kg	☼	37		60 - 116	80	30
Bis(2-chloroethoxy)methane	<0.20	F1 F2	1.62	0.702	F1 F2	mg/Kg	☼	43		60 - 112	76	30
1,2,4-Trichlorobenzene	<0.20	F1 F2	1.62	0.617	F1 F2	mg/Kg	☼	38		66 - 117	75	30
Isophorone	<0.20	F1 F2	1.62	0.657	F1 F2	mg/Kg	☼	41		55 - 110	78	30
2,4-Dimethylphenol	<0.40	F1 F2	1.62	0.662	F1 F2	mg/Kg	☼	41		60 - 110	80	30
Hexachlorobutadiene	<0.20	F1 F2	1.62	0.558	F1 F2	mg/Kg	☼	34		56 - 120	73	30
Naphthalene	<0.040	F1 F2	1.62	0.666	F1 F2	mg/Kg	☼	41		63 - 110	75	30
2,4-Dichlorophenol	<0.40	F1 F2	1.62	0.581	F1 F2	mg/Kg	☼	36		58 - 120	87	30
4-Chloroaniline	<0.81	F1 F2	1.62	0.436	J F1 F2	mg/Kg	☼	27		30 - 150	89	30
2,4,6-Trichlorophenol	<0.40	F1 F2	1.62	0.574	F1 F2	mg/Kg	☼	35		57 - 120	83	30
2,4,5-Trichlorophenol	<0.40	F1 F2	1.62	0.523	F1 F2	mg/Kg	☼	32		50 - 120	93	30
Hexachlorocyclopentadiene	<0.81	F1 *	1.62	<0.81	F1	mg/Kg	☼	0		10 - 133	NC	30
2-Methylnaphthalene	<0.081	F1 F2	1.62	0.649	F1 F2	mg/Kg	☼	40		69 - 112	78	30
2-Nitroaniline	<0.20	F1 F2	1.62	0.591	F1 F2	mg/Kg	☼	36		57 - 124	83	30
2-Chloronaphthalene	<0.20	F1 F2	1.62	0.668	F1 F2	mg/Kg	☼	41		69 - 114	80	30
4-Chloro-3-methylphenol	<0.40	F1 F2	1.62	0.669	F1 F2	mg/Kg	☼	41		65 - 122	77	30
2,6-Dinitrotoluene	<0.20	F1 F2	1.62	0.609	F1 F2	mg/Kg	☼	38		70 - 123	87	30
2-Nitrophenol	<0.40	F1 F2	1.62	0.550	F1 F2	mg/Kg	☼	34		60 - 120	83	30
3-Nitroaniline	<0.40	F2	1.62	0.781	F2	mg/Kg	☼	48		40 - 122	65	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174194-1 MSD

Matrix: Solid

Analysis Batch: 519291

Client Sample ID: 2615V2-AI-B05 (0-6)

Prep Type: Total/NA

Prep Batch: 519281

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier						
Dimethyl phthalate	<0.20	F1 F2	1.62	0.665	F1 F2	mg/Kg	☼	41	69 - 116	82	30
2,4-Dinitrophenol	<0.81	F1	3.24	<0.81	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.040	F1 F2	1.62	0.694	F1 F2	mg/Kg	☼	43	68 - 120	78	30
2,4-Dinitrotoluene	<0.20	F1 F2	1.62	0.527	F1 F2	mg/Kg	☼	33	69 - 124	89	30
Acenaphthene	<0.040	F1 F2	1.62	0.685	F1 F2	mg/Kg	☼	42	65 - 124	78	30
Dibenzofuran	<0.20	F1 F2	1.62	0.699	F1 F2	mg/Kg	☼	43	66 - 115	76	30
4-Nitrophenol	<0.81	F1	3.24	<0.81	F1	mg/Kg	☼	0	30 - 122	NC	30
Fluorene	<0.040	F1 F2	1.62	0.669	F1 F2	mg/Kg	☼	41	62 - 120	81	30
4-Nitroaniline	<0.40	F1 F2	1.62	0.691	F1 F2	mg/Kg	☼	43	60 - 160	76	30
4-Bromophenyl phenyl ether	<0.20	F1 F2	1.62	0.618	F1 F2	mg/Kg	☼	38	68 - 118	74	30
Hexachlorobenzene	<0.081	F1 F2	1.62	0.578	F1 F2	mg/Kg	☼	36	63 - 124	73	30
Diethyl phthalate	<0.20	F1 F2	1.62	0.673	F1 F2	mg/Kg	☼	42	58 - 120	80	30
4-Chlorophenyl phenyl ether	<0.20	F1 F2	1.62	0.579	F1 F2	mg/Kg	☼	36	62 - 119	78	30
Pentachlorophenol	<0.81	F1	3.24	<0.81	F1	mg/Kg	☼	0	13 - 112	NC	30
N-Nitrosodiphenylamine	<0.20	F1 F2	1.62	0.800	F1 F2	mg/Kg	☼	49	65 - 112	83	30
4,6-Dinitro-2-methylphenol	<0.81	F1	3.24	<0.81	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.12	F1 F2	1.62	0.780	F1 F2	mg/Kg	☼	41	62 - 120	77	30
Anthracene	<0.040	F1 F2	1.62	0.681	F1 F2	mg/Kg	☼	42	70 - 114	80	30
Carbazole	<0.20	F1 F2	1.62	0.818	F1 F2	mg/Kg	☼	50	65 - 142	78	30
Di-n-butyl phthalate	<0.20	F1 F2	1.62	0.751	F1 F2	mg/Kg	☼	46	65 - 120	78	30
Fluoranthene	<0.040	F1 F2	1.62	0.628	F1 F2	mg/Kg	☼	39	62 - 120	74	30
Pyrene	<0.040	F1 F2	1.62	0.802	F1 F2	mg/Kg	☼	49	61 - 128	79	30
Butyl benzyl phthalate	<0.20	F1 F2	1.62	0.834	F1 F2	mg/Kg	☼	51	71 - 129	80	30
Benzo[a]anthracene	<0.040	F1 F2	1.62	0.669	F1 F2	mg/Kg	☼	41	67 - 122	83	30
Chrysene	<0.040	F1 F2	1.62	0.700	F1 F2	mg/Kg	☼	43	63 - 120	77	30
3,3'-Dichlorobenzidine	<0.20	F1 F2	1.62	0.284	F1 F2	mg/Kg	☼	18	35 - 128	70	30
Bis(2-ethylhexyl) phthalate	<0.20	F1 F2	1.62	0.865	F1 F2	mg/Kg	☼	53	72 - 131	79	30
Di-n-octyl phthalate	<0.20	F1 F2	1.62	0.688	F1 F2	mg/Kg	☼	42	68 - 134	78	30
Benzo[b]fluoranthene	<0.040	F1 F2	1.62	0.769	F1 F2	mg/Kg	☼	47	69 - 129	63	30
Benzo[k]fluoranthene	<0.040	F1 F2	1.62	0.796	F1 F2	mg/Kg	☼	49	68 - 127	88	30
Benzo[a]pyrene	<0.040	F1 F2	1.62	0.728	F1 F2	mg/Kg	☼	45	65 - 133	80	30
Indeno[1,2,3-cd]pyrene	<0.040	F1 F2	1.62	0.510	F1 F2	mg/Kg	☼	31	68 - 130	81	30
Dibenz(a,h)anthracene	<0.040	F1 F2	1.62	0.506	F1 F2	mg/Kg	☼	31	64 - 131	82	30
Benzo[g,h,i]perylene	<0.040	F1 F2	1.62	0.389	F1 F2	mg/Kg	☼	24	72 - 131	79	30
3 & 4 Methylphenol	<0.20	F1 F2	1.62	0.604	F1 F2	mg/Kg	☼	37	57 - 120	78	30

Surrogate	MSD		Limits
	%Recovery	Qualifier	
2-Fluorophenol	70		31 - 166
Phenol-d5	64		30 - 153
Nitrobenzene-d5	77		37 - 147
2-Fluorobiphenyl	83		43 - 145
2,4,6-Tribromophenol	48		31 - 143
Terphenyl-d14	82		42 - 157

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 500-518668/1-C
Matrix: Solid
Analysis Batch: 519246

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519101

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/06/19 23:31	1
Cresol, o-	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/06/19 23:31	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/06/19 23:31	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/06/19 23:31	1
Pyridine	<0.20		0.20	0.20	mg/L		12/06/19 08:39	12/06/19 23:31	1
Hexachloro-1,3-butadiene	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/06/19 23:31	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		12/06/19 08:39	12/06/19 23:31	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		12/06/19 08:39	12/06/19 23:31	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		12/06/19 08:39	12/06/19 23:31	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		12/06/19 08:39	12/06/19 23:31	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		12/06/19 08:39	12/06/19 23:31	1
m & p - Cresol	<0.020		0.020	0.020	mg/L		12/06/19 08:39	12/06/19 23:31	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	66		27 - 110	12/06/19 08:39	12/06/19 23:31	1
Phenol-d5	42		20 - 100	12/06/19 08:39	12/06/19 23:31	1
Nitrobenzene-d5	82		36 - 120	12/06/19 08:39	12/06/19 23:31	1
2-Fluorobiphenyl	92		34 - 110	12/06/19 08:39	12/06/19 23:31	1
2,4,6-Tribromophenol	85		40 - 145	12/06/19 08:39	12/06/19 23:31	1
Terphenyl-d14	121		40 - 145	12/06/19 08:39	12/06/19 23:31	1

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 500-519560/1-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.00010		0.00010	0.000050	mg/L		12/09/19 13:27	12/10/19 10:23	1
Endrin	<0.000050		0.000050	0.000025	mg/L		12/09/19 13:27	12/10/19 10:23	1
gamma-BHC (Lindane)	<0.000050		0.000050	0.000025	mg/L		12/09/19 13:27	12/10/19 10:23	1
Heptachlor	<0.000040		0.000040	0.000020	mg/L		12/09/19 13:27	12/10/19 10:23	1
Heptachlor epoxide	<0.000040		0.000040	0.000020	mg/L		12/09/19 13:27	12/10/19 10:23	1
Methoxychlor	<0.00010		0.00010	0.000050	mg/L		12/09/19 13:27	12/10/19 10:23	1
Toxaphene	<0.00050		0.00050	0.00025	mg/L		12/09/19 13:27	12/10/19 10:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	102		30 - 130	12/09/19 13:27	12/10/19 10:23	1
Tetrachloro-m-xylene	100		30 - 120	12/09/19 13:27	12/10/19 10:23	1

Lab Sample ID: LCS 500-519560/2-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Endrin	0.0000996	0.000104		mg/L		104	60 - 132
gamma-BHC (Lindane)	0.0000999	0.0000951		mg/L		95	68 - 120
Heptachlor	0.0000999	0.0000997		mg/L		100	40 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 500-519560/2-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor epoxide	0.000100	0.000109		mg/L		109	64 - 120
Methoxychlor	0.00100	0.000947		mg/L		95	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	106		30 - 130
Tetrachloro-m-xylene	98		30 - 120

Lab Sample ID: LCS 500-519560/3-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	0.0100	0.0105		mg/L		105	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	105		30 - 130
Tetrachloro-m-xylene	96		30 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-519604/1-A
Matrix: Solid
Analysis Batch: 519618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.017		0.017	0.0059	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1221	<0.017		0.017	0.0073	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1232	<0.017		0.017	0.0073	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1242	<0.017		0.017	0.0055	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1248	<0.017		0.017	0.0066	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1254	<0.017		0.017	0.0036	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1260	<0.017		0.017	0.0082	mg/Kg		12/09/19 16:08	12/10/19 09:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		37 - 121	12/09/19 16:08	12/10/19 09:27	1
Tetrachloro-m-xylene	101		49 - 129	12/09/19 16:08	12/10/19 09:27	1

Lab Sample ID: LCS 500-519604/3-A
Matrix: Solid
Analysis Batch: 519618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519604

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.167	0.163		mg/Kg		98	57 - 120
PCB-1260	0.167	0.140		mg/Kg		84	61 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	95		37 - 121
Tetrachloro-m-xylene	104		49 - 129

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 8151 - TCLP Herbicides

Lab Sample ID: MB 500-519789/1-A
Matrix: Solid
Analysis Batch: 519870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0010		0.0010	0.00050	mg/L		12/10/19 11:27	12/11/19 04:56	1
Silvex (2,4,5-TP)	<0.0010		0.0010	0.00050	mg/L		12/10/19 11:27	12/11/19 04:56	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	79		25 - 130				12/10/19 11:27	12/11/19 04:56	1

Lab Sample ID: LCS 500-519789/2-A
Matrix: Solid
Analysis Batch: 519870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519789
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4-D	0.0101	0.00848		mg/L		84	30 - 115
Silvex (2,4,5-TP)	0.00250	0.00183		mg/L		73	32 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
DCAA	73		25 - 130				

Lab Sample ID: LB 500-518668/1-E
Matrix: Solid
Analysis Batch: 519870

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519789

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 05:54	1
Silvex (2,4,5-TP)	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 05:54	1
Surrogate	LB %Recovery	LB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	85		25 - 130				12/10/19 11:27	12/11/19 05:54	1

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-518997/25-A
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518997
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.481	J	mg/L		96	80 - 120
Beryllium	0.0500	0.0473		mg/L		95	80 - 120
Boron	1.00	0.895		mg/L		90	80 - 120
Cadmium	0.0500	0.0457		mg/L		91	80 - 120
Chromium	0.200	0.191		mg/L		95	80 - 120
Cobalt	0.500	0.466		mg/L		93	80 - 120
Lead	0.100	0.0900		mg/L		90	80 - 120
Manganese	0.500	0.470		mg/L		94	80 - 120
Nickel	0.500	0.469		mg/L		94	80 - 120
Selenium	0.100	0.0919		mg/L		92	80 - 120
Silver	0.0500	0.0460		mg/L		92	80 - 120
Zinc	0.500	0.468	J	mg/L		94	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-518997/25-A
Matrix: Solid
Analysis Batch: 519568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518997
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: LCS 500-518997/2-A
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518997
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	0.500	0.469	J	mg/L		94	80 - 120
Beryllium	0.0500	0.0475		mg/L		95	80 - 120
Boron	1.00	0.867		mg/L		87	80 - 120
Cadmium	0.0500	0.0489		mg/L		98	80 - 120
Chromium	0.200	0.196		mg/L		98	80 - 120
Cobalt	0.500	0.515		mg/L		103	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Manganese	0.500	0.469		mg/L		94	80 - 120
Nickel	0.500	0.521		mg/L		104	80 - 120
Selenium	0.100	0.0936		mg/L		94	80 - 120
Silver	0.0500	0.0523		mg/L		105	80 - 120
Zinc	0.500	0.566		mg/L		113	80 - 120

Lab Sample ID: LCS 500-518997/2-A
Matrix: Solid
Analysis Batch: 519568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518997
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: LCS 500-518998/2-A
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518998
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.492	J	mg/L		98	80 - 120
Beryllium	0.0500	0.0482		mg/L		96	80 - 120
Boron	1.00	0.909		mg/L		91	80 - 120
Cadmium	0.0500	0.0527		mg/L		105	80 - 120
Chromium	0.200	0.195		mg/L		98	80 - 120
Cobalt	0.500	0.511		mg/L		102	80 - 120
Iron	1.00	0.967		mg/L		97	80 - 120
Lead	0.100	0.0963		mg/L		96	80 - 120
Manganese	0.500	0.476		mg/L		95	80 - 120
Nickel	0.500	0.510		mg/L		102	80 - 120
Selenium	0.100	0.108		mg/L		108	80 - 120
Silver	0.0500	0.0528		mg/L		106	80 - 120
Zinc	0.500	0.562		mg/L		112	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-519024/1-A
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519024

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.394	J	2.0	0.39	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Barium	<1.0		1.0	0.11	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Boron	<5.0		5.0	0.47	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Cadmium	0.0450	J	0.20	0.036	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Calcium	13.9	J	20	3.4	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Chromium	0.597	J	1.0	0.50	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Copper	<1.0	^	1.0	0.28	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Lead	<0.50		0.50	0.23	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Magnesium	10.6		10	5.0	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Manganese	0.408	J	1.0	0.15	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Potassium	<50		50	18	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Silver	<0.50		0.50	0.13	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Sodium	<100		100	15	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/05/19 18:00	12/07/19 01:04	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/05/19 18:00	12/07/19 01:04	1

Lab Sample ID: MB 500-519024/1-A
Matrix: Solid
Analysis Batch: 519679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519024

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	<20		20	10	mg/Kg		12/05/19 18:00	12/09/19 19:38	1

Lab Sample ID: LCS 500-519024/2-A
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519024

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.0	9.12		mg/Kg		91	80 - 120
Barium	200	184		mg/Kg		92	80 - 120
Beryllium	5.00	4.62		mg/Kg		92	80 - 120
Boron	100	86.0		mg/Kg		86	80 - 120
Cadmium	5.00	4.55		mg/Kg		91	80 - 120
Calcium	1000	952		mg/Kg		95	80 - 120
Chromium	20.0	19.6		mg/Kg		98	80 - 120
Cobalt	50.0	47.1		mg/Kg		94	80 - 120
Copper	25.0	23.4	^	mg/Kg		94	80 - 120
Lead	10.0	9.41		mg/Kg		94	80 - 120
Magnesium	1000	930		mg/Kg		93	80 - 120
Manganese	50.0	46.5		mg/Kg		93	80 - 120
Nickel	50.0	47.5		mg/Kg		95	80 - 120
Potassium	1000	937		mg/Kg		94	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-519024/2-A
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519024

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	10.0	8.22		mg/Kg		82	80 - 120
Silver	5.00	4.45		mg/Kg		89	80 - 120
Sodium	1000	953		mg/Kg		95	80 - 120
Thallium	10.0	9.14		mg/Kg		91	80 - 120
Vanadium	50.0	47.1		mg/Kg		94	80 - 120
Zinc	50.0	46.4		mg/Kg		93	80 - 120

Lab Sample ID: LCS 500-519024/2-A
Matrix: Solid
Analysis Batch: 519679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519024

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	100	116		mg/Kg		116	80 - 120

Lab Sample ID: MB 500-519025/1-A
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519025

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Barium	<1.0		1.0	0.11	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Boron	<5.0		5.0	0.47	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Cadmium	0.0459	J	0.20	0.036	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Calcium	<20		20	3.4	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Chromium	0.872	J	1.0	0.50	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Copper	<1.0		1.0	0.28	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Iron	13.6	J	20	10	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Lead	<0.50		0.50	0.23	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Magnesium	<10		10	5.0	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Potassium	<50		50	18	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Silver	<0.50		0.50	0.13	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Sodium	<100		100	15	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/05/19 18:06	12/06/19 17:38	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/05/19 18:06	12/06/19 17:38	1

Lab Sample ID: LCS 500-519025/2-A
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519025

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.9		mg/Kg		96	80 - 120
Arsenic	10.0	9.15		mg/Kg		91	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-519025/2-A
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519025

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	200	194		mg/Kg		97	80 - 120
Beryllium	5.00	4.85		mg/Kg		97	80 - 120
Boron	100	85.9		mg/Kg		86	80 - 120
Cadmium	5.00	4.57		mg/Kg		91	80 - 120
Calcium	1000	999		mg/Kg		100	80 - 120
Chromium	20.0	19.7		mg/Kg		98	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Copper	25.0	23.5		mg/Kg		94	80 - 120
Lead	10.0	9.50		mg/Kg		95	80 - 120
Magnesium	1000	959		mg/Kg		96	80 - 120
Manganese	50.0	48.2		mg/Kg		96	80 - 120
Nickel	50.0	49.4		mg/Kg		99	80 - 120
Potassium	1000	966		mg/Kg		97	80 - 120
Selenium	10.0	8.09		mg/Kg		81	80 - 120
Silver	5.00	4.52		mg/Kg		90	80 - 120
Sodium	1000	967		mg/Kg		97	80 - 120
Thallium	10.0	9.34		mg/Kg		93	80 - 120
Vanadium	50.0	47.5		mg/Kg		95	80 - 120
Zinc	50.0	48.2		mg/Kg		96	80 - 120

Lab Sample ID: 500-174194-1 MS
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: 2615V2-AI-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 519025

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.80	J F1	28.0	4.94	F1	mg/Kg	☼	15	75 - 125
Arsenic	8.7	F1	5.60	12.2	F1	mg/Kg	☼	64	75 - 125
Barium	20		112	122		mg/Kg	☼	91	75 - 125
Beryllium	0.77		2.80	3.19		mg/Kg	☼	87	75 - 125
Boron	14		56.0	62.6		mg/Kg	☼	86	75 - 125
Cadmium	0.14	F2 B	2.80	2.29		mg/Kg	☼	77	75 - 125
Calcium	28000		560	30600	4	mg/Kg	☼	388	75 - 125
Chromium	17	B	11.2	29.4		mg/Kg	☼	107	75 - 125
Cobalt	17		28.0	43.9		mg/Kg	☼	97	75 - 125
Copper	33		14.0	47.3		mg/Kg	☼	101	75 - 125
Iron	23000	B	56.0	21900	4	mg/Kg	☼	-1473	75 - 125
Lead	17		5.60	21.7		mg/Kg	☼	88	75 - 125
Magnesium	19000		560	22100	4	mg/Kg	☼	483	75 - 125
Manganese	260		28.0	292	4	mg/Kg	☼	123	75 - 125
Nickel	45		28.0	71.2		mg/Kg	☼	92	75 - 125
Potassium	2700		560	5070	4	mg/Kg	☼	415	75 - 125
Selenium	0.77	F1	5.60	4.53	F1	mg/Kg	☼	67	75 - 125
Silver	2.4		2.80	4.98		mg/Kg	☼	92	75 - 125
Sodium	1200		560	1660		mg/Kg	☼	88	75 - 125
Thallium	1.1		5.60	5.66		mg/Kg	☼	81	75 - 125
Vanadium	19		28.0	48.0		mg/Kg	☼	103	75 - 125
Zinc	54	F1 F2	28.0	84.3		mg/Kg	☼	109	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174194-1 MSD
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: 2615V2-AI-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 519025

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Antimony	0.80	J F1	28.8	5.10	F1	mg/Kg	☼	15	75 - 125	3	20
Arsenic	8.7	F1	5.76	12.2	F1	mg/Kg	☼	61	75 - 125	1	20
Barium	20		115	129		mg/Kg	☼	94	75 - 125	5	20
Beryllium	0.77		2.88	3.34		mg/Kg	☼	89	75 - 125	5	20
Boron	14		57.6	64.0		mg/Kg	☼	86	75 - 125	2	20
Cadmium	0.14	F2 B	2.88	3.29	F2	mg/Kg	☼	109	75 - 125	36	20
Chromium	17	B	11.5	29.4		mg/Kg	☼	105	75 - 125	0	20
Cobalt	17		28.8	44.0		mg/Kg	☼	95	75 - 125	0	20
Copper	33		14.4	46.1		mg/Kg	☼	89	75 - 125	3	20
Iron	23000	B	57.6	20600	4	mg/Kg	☼	-3598	75 - 125	6	20
Lead	17		5.76	22.4		mg/Kg	☼	100	75 - 125	4	20
Magnesium	19000		576	24900	4	mg/Kg	☼	945	75 - 125	12	20
Manganese	260		28.8	275	4	mg/Kg	☼	58	75 - 125	6	20
Nickel	45		28.8	70.9		mg/Kg	☼	89	75 - 125	0	20
Potassium	2700		576	4880	4	mg/Kg	☼	370	75 - 125	4	20
Selenium	0.77	F1	5.76	4.96	F1	mg/Kg	☼	73	75 - 125	9	20
Silver	2.4		2.88	4.95		mg/Kg	☼	88	75 - 125	1	20
Sodium	1200		576	1620		mg/Kg	☼	80	75 - 125	2	20
Thallium	1.1		5.76	5.57		mg/Kg	☼	77	75 - 125	2	20
Vanadium	19		28.8	48.3		mg/Kg	☼	101	75 - 125	1	20
Zinc	54	F1 F2	28.8	1060	F1 F2	mg/Kg	☼	3490	75 - 125	171	20

Lab Sample ID: 500-174194-1 DU
Matrix: Solid
Analysis Batch: 519451

Client Sample ID: 2615V2-AI-B05 (0-6)
Prep Type: Total/NA
Prep Batch: 519025

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
Antimony	0.80	J F1	0.676	J	mg/Kg	☼	17	20
Arsenic	8.7	F1	6.65	F3	mg/Kg	☼	26	20
Barium	20		33.4	F3	mg/Kg	☼	48	20
Beryllium	0.77		0.660		mg/Kg	☼	15	20
Boron	14		13.2		mg/Kg	☼	8	20
Cadmium	0.14	F2 B	0.115	J	mg/Kg	☼	19	20
Calcium	28000		28000		mg/Kg	☼	1	20
Chromium	17	B	15.4		mg/Kg	☼	12	20
Cobalt	17		13.4	F3	mg/Kg	☼	22	20
Copper	33		29.0		mg/Kg	☼	14	20
Iron	23000	B	18700		mg/Kg	☼	20	20
Lead	17		14.7		mg/Kg	☼	13	20
Magnesium	19000		18400		mg/Kg	☼	5	20
Manganese	260		231		mg/Kg	☼	11	20
Nickel	45		37.1		mg/Kg	☼	20	20
Potassium	2700		2560		mg/Kg	☼	7	20
Selenium	0.77	F1	0.724		mg/Kg	☼	6	20
Silver	2.4		2.12		mg/Kg	☼	13	20
Sodium	1200		1100		mg/Kg	☼	6	20
Thallium	1.1		1.10		mg/Kg	☼	2	20
Vanadium	19		16.9		mg/Kg	☼	13	20
Zinc	54	F1 F2	48.3		mg/Kg	☼	11	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-519239/2-A
Matrix: Solid
Analysis Batch: 519678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519239
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.0872		mg/L		87	80 - 120
Manganese	0.500	0.497		mg/L		99	80 - 120
Nickel	0.500	0.505		mg/L		101	80 - 120

Lab Sample ID: LCS 500-519240/2-A
Matrix: Solid
Analysis Batch: 519564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519240
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.465		mg/L		93	80 - 120

Lab Sample ID: LB 500-518668/1-B
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518997

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		12/05/19 15:44	12/07/19 03:19	1
Barium	<0.50		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 03:19	1
Boron	<0.50		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 03:19	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 03:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:19	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:44	12/07/19 03:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 03:19	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:19	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 03:19	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 03:19	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 03:19	1

Lab Sample ID: LB2 500-518670/1-B
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518997

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:44	12/07/19 05:21	1
Boron	<0.50		0.50	0.050	mg/L		12/05/19 15:44	12/07/19 05:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:44	12/07/19 05:21	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:21	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:21	1
Iron	0.216	J	0.40	0.20	mg/L		12/05/19 15:44	12/07/19 05:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:44	12/07/19 05:21	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:21	1
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:21	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:44	12/07/19 05:21	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:44	12/07/19 05:21	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:44	12/07/19 05:21	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174194-20 MS
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: 2615V2-AI-B06 (18-24)
Prep Type: TCLP
Prep Batch: 518997

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	<0.050		0.100	0.108		mg/L		108	75 - 125
Barium	0.72		0.500	1.12		mg/L		80	75 - 125
Beryllium	<0.0040		0.0500	0.0454		mg/L		91	75 - 125
Boron	1.2	F1	1.00	0.994	F1	mg/L		-22	75 - 125
Cadmium	<0.0050		0.0500	0.0483		mg/L		97	75 - 125
Chromium	<0.025		0.200	0.180		mg/L		90	75 - 125
Cobalt	0.016	J	0.500	0.509		mg/L		99	75 - 125
Iron	0.33	J ^	1.00	1.24		mg/L		91	75 - 125
Lead	<0.0075		0.100	0.102		mg/L		102	75 - 125
Manganese	1.8		0.500	2.27		mg/L		98	75 - 125
Nickel	0.052		0.500	0.537		mg/L		97	75 - 125
Selenium	<0.050		0.100	0.0975		mg/L		97	75 - 125
Silver	<0.025		0.0500	0.0491		mg/L		98	75 - 125
Zinc	0.088	J	0.500	0.528		mg/L		88	75 - 125

Lab Sample ID: 500-174194-20 DU
Matrix: Solid
Analysis Batch: 519450

Client Sample ID: 2615V2-AI-B06 (18-24)
Prep Type: TCLP
Prep Batch: 518997

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	<0.050		<0.050		mg/L		NC	20
Barium	0.72		0.727		mg/L		0.9	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	1.2	F1	1.22		mg/L		0.7	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.016	J	0.0157	J	mg/L		3	20
Iron	0.33	J ^	0.294	J	mg/L		12	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.79		mg/L		0.5	20
Nickel	0.052		0.0521		mg/L		0.1	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.088	J	0.0889	J	mg/L		0.7	20

Lab Sample ID: LB 500-518671/1-B
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518998

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/05/19 15:46	12/06/19 14:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/05/19 15:46	12/06/19 14:18	1
Boron	<0.50		0.50	0.050	mg/L		12/05/19 15:46	12/06/19 14:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/05/19 15:46	12/06/19 14:18	1
Chromium	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:18	1
Cobalt	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:18	1
Iron	<0.40		0.40	0.20	mg/L		12/05/19 15:46	12/06/19 14:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/05/19 15:46	12/06/19 14:18	1
Manganese	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:18	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-518671/1-B
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518998

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nickel	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:18	1
Selenium	<0.050		0.050	0.020	mg/L		12/05/19 15:46	12/06/19 14:18	1
Silver	<0.025		0.025	0.010	mg/L		12/05/19 15:46	12/06/19 14:18	1
Zinc	<0.50		0.50	0.020	mg/L		12/05/19 15:46	12/06/19 14:18	1

Lab Sample ID: 500-174194-21 MS
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: TCLP
Prep Batch: 518998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Barium	0.83		0.500	1.24		mg/L		82	75 - 125
Beryllium	<0.0040		0.0500	0.0472		mg/L		94	75 - 125
Boron	1.3	F1	1.00	0.997	F1	mg/L		-28	75 - 125
Cadmium	<0.0050		0.0500	0.0494		mg/L		99	75 - 125
Chromium	<0.025		0.200	0.183		mg/L		91	75 - 125
Cobalt	0.012	J	0.500	0.486		mg/L		95	75 - 125
Iron	<0.40		1.00	1.04		mg/L		104	75 - 125
Lead	<0.0075		0.100	0.0913		mg/L		91	75 - 125
Manganese	1.8		0.500	2.38		mg/L		111	75 - 125
Nickel	0.038		0.500	0.511		mg/L		94	75 - 125
Selenium	<0.050		0.100	0.0929		mg/L		93	75 - 125
Silver	<0.025		0.0500	0.0537		mg/L		107	75 - 125
Zinc	0.085	J	0.500	0.514		mg/L		86	75 - 125

Lab Sample ID: 500-174194-21 DU
Matrix: Solid
Analysis Batch: 519452

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: TCLP
Prep Batch: 518998

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Barium	0.83		0.817		mg/L		2	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	1.3	F1	1.27		mg/L		0.5	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.012	J	0.0111	J	mg/L		8	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.82		mg/L		0.2	20
Nickel	0.038		0.0399		mg/L		4	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.085	J	0.0916	J	mg/L		8	20

Lab Sample ID: LB 500-518956/1-B
Matrix: Solid
Analysis Batch: 519678

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 519239

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:37	12/10/19 04:05	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-518956/1-B
Matrix: Solid
Analysis Batch: 519678

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 519239

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:05	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:37	12/10/19 04:05	1

Lab Sample ID: 500-174194-20 MS
Matrix: Solid
Analysis Batch: 519678

Client Sample ID: 2615V2-AI-B06 (18-24)
Prep Type: SPLP East
Prep Batch: 519239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Lead	<0.0075		0.100	0.0931		mg/L		93	75 - 125
Manganese	0.053		0.500	0.542		mg/L		98	75 - 125
Nickel	0.011	J	0.500	0.504		mg/L		99	75 - 125

Lab Sample ID: 500-174194-20 DU
Matrix: Solid
Analysis Batch: 519678

Client Sample ID: 2615V2-AI-B06 (18-24)
Prep Type: SPLP East
Prep Batch: 519239

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.053		0.0549		mg/L		3	20
Nickel	0.011	J	0.0105	J	mg/L		8	20

Lab Sample ID: LB 500-518974/1-B
Matrix: Solid
Analysis Batch: 519564

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 519240

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/06/19 15:39	12/09/19 12:33	1

Lab Sample ID: 500-174194-21 MS
Matrix: Solid
Analysis Batch: 519564

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: SPLP East
Prep Batch: 519240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Manganese	0.16		0.500	0.703		mg/L		109	75 - 125

Lab Sample ID: 500-174194-21 DU
Matrix: Solid
Analysis Batch: 519564

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: SPLP East
Prep Batch: 519240

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Manganese	0.16		0.162		mg/L		2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-518997/2-A
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518997

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	0.500	0.499		mg/L		100	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-518997/2-A
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518997
%Rec. Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Thallium	0.100	0.0971		mg/L		97	80 - 120

Lab Sample ID: LCS 500-518998/2-A
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518998
%Rec. Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Thallium	0.100	0.108		mg/L		108	80 - 120

Lab Sample ID: LCS 500-518998/2-A
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518998
%Rec. Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.539		mg/L		108	80 - 120

Lab Sample ID: LB 500-518668/1-B
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518997

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 15:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 15:04	1

Lab Sample ID: LB2 500-518670/1-B
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518997

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:44	12/09/19 18:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:44	12/09/19 18:05	1

Lab Sample ID: 500-174194-20 MS
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: 2615V2-AI-B06 (18-24)
Prep Type: TCLP
Prep Batch: 518997
%Rec. Limits

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.478		mg/L		96	75 - 125
Thallium	<0.0020		0.100	0.0989		mg/L		99	75 - 125

Lab Sample ID: 500-174194-20 DU
Matrix: Solid
Analysis Batch: 519764

Client Sample ID: 2615V2-AI-B06 (18-24)
Prep Type: TCLP
Prep Batch: 518997
RPD Limit

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LB 500-518671/1-B
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518998

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		12/05/19 15:46	12/06/19 22:09	1

Lab Sample ID: LB 500-518671/1-B
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 518998

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/05/19 15:46	12/09/19 18:15	1

Lab Sample ID: 500-174194-21 MS
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: TCLP
Prep Batch: 518998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	<0.0020		0.100	0.109		mg/L		109	75 - 125

Lab Sample ID: 500-174194-21 MS
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: TCLP
Prep Batch: 518998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0060		0.500	0.525		mg/L		105	75 - 125

Lab Sample ID: 500-174194-21 DU
Matrix: Solid
Analysis Batch: 519532

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: TCLP
Prep Batch: 518998

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: 500-174194-21 DU
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: 2615V2-AI-B06 (24-30)
Prep Type: TCLP
Prep Batch: 518998

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-519016/12-A
Matrix: Solid
Analysis Batch: 519167

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519016

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/19 16:30	12/06/19 08:55	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-519016/13-A
Matrix: Solid
Analysis Batch: 519167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519016
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00197		mg/L		99	80 - 120

Lab Sample ID: MB 500-519138/12-A
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519138

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:31	1

Lab Sample ID: LCS 500-519138/13-A
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519138
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00211		mg/L		106	80 - 120

Lab Sample ID: LB 500-518671/1-C
Matrix: Solid
Analysis Batch: 519167

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519016

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/19 16:30	12/06/19 09:45	1

Lab Sample ID: LB2 500-518670/1-C
Matrix: Solid
Analysis Batch: 519167

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519016

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/05/19 16:30	12/06/19 09:53	1

Lab Sample ID: LB 500-518668/1-D
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519138

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/06/19 09:20	12/09/19 09:35	1

Lab Sample ID: 500-174194-9 MS
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: 2615V2-AI-B13 (12-18)
Prep Type: TCLP
Prep Batch: 519138
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000999		mg/L		100	75 - 125

Lab Sample ID: 500-174194-9 DU
Matrix: Solid
Analysis Batch: 519550

Client Sample ID: 2615V2-AI-B13 (12-18)
Prep Type: TCLP
Prep Batch: 519138

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-519149/12-A
Matrix: Solid
Analysis Batch: 519537

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/06/19 13:50	12/09/19 08:19	1

Lab Sample ID: LCS 500-519149/13-A
Matrix: Solid
Analysis Batch: 519537

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

Lab Sample ID: 500-174194-10 MS
Matrix: Solid
Analysis Batch: 519537

Client Sample ID: 2615V2-AI-B13 (18-24)
Prep Type: Total/NA
Prep Batch: 519149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.019		0.0976	0.0974		mg/Kg	☼	100	75 - 125

Lab Sample ID: 500-174194-10 MSD
Matrix: Solid
Analysis Batch: 519537

Client Sample ID: 2615V2-AI-B13 (18-24)
Prep Type: Total/NA
Prep Batch: 519149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.019		0.0976	0.0946		mg/Kg	☼	97	75 - 125	3	20

Lab Sample ID: 500-174194-10 DU
Matrix: Solid
Analysis Batch: 519537

Client Sample ID: 2615V2-AI-B13 (18-24)
Prep Type: Total/NA
Prep Batch: 519149

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.019		0.0131	J	mg/Kg	☼	NC	20

Lab Sample ID: MB 500-519538/12-A
Matrix: Solid
Analysis Batch: 519785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/09/19 15:35	12/10/19 08:35	1

Lab Sample ID: LCS 500-519538/13-A
Matrix: Solid
Analysis Batch: 519785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.168		mg/Kg		101	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 7.3.4 - Reactive Sulfide

Lab Sample ID: MB 500-519022/1-A
Matrix: Solid
Analysis Batch: 519041

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<50		50	3.9	mg/Kg		12/05/19 17:51	12/06/19 00:35	1

Lab Sample ID: LCS 500-519022/2-A
Matrix: Solid
Analysis Batch: 519041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sulfide, Reactive	181	160		mg/Kg		88	80 - 120

Lab Sample ID: 500-174194-7 MS
Matrix: Solid
Analysis Batch: 519041

Client Sample ID: 2615V2-AI-B13 (0-6)
Prep Type: Total/NA
Prep Batch: 519022

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sulfide, Reactive	<50		174	145		mg/Kg		83	75 - 125

Lab Sample ID: 500-174194-7 MSD
Matrix: Solid
Analysis Batch: 519041

Client Sample ID: 2615V2-AI-B13 (0-6)
Prep Type: Total/NA
Prep Batch: 519022

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfide, Reactive	<50		181	151		mg/Kg		83	75 - 125	4	20

Method: 9014 - Reactive Cyanide

Lab Sample ID: MB 500-519148/1-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<0.50		0.50	0.50	mg/Kg		12/06/19 10:45	12/06/19 13:21	1

Lab Sample ID: HLCS 500-519148/2-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519148

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	20.0	19.6		mg/Kg		98	90 - 110

Lab Sample ID: LCS 500-519148/3-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	5.00	5.16		mg/Kg		103	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Method: 9014 - Reactive Cyanide (Continued)

Lab Sample ID: LLCS 500-519148/4-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519148

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	2.00	1.60		mg/Kg		80	75 - 125

Method: 9045D - pH

Lab Sample ID: 500-174194-1 DU
Matrix: Solid
Analysis Batch: 518384

Client Sample ID: 2615V2-AI-B05 (0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.3		8.3		SU		0.2	

Lab Sample ID: 500-174194-18 DU
Matrix: Solid
Analysis Batch: 518384

Client Sample ID: 2615V2-AI-B06 (6-12)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.8		7.8		SU		0.1	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Date Collected: 11/26/19 09:00

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:13	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 03:27	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:11	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 12:00 (End) 12/03/19 12:05	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518353	12/03/19 10:08	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B05 (0-6)

Lab Sample ID: 500-174194-1

Date Collected: 11/26/19 09:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 13:16	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 19:52	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 17:46	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:23	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:26	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 03:32	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:15	FXG	TAL CHI

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Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 09:41	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:09		
					(End)	12/03/19 12:13		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B05 (6-12)

Lab Sample ID: 500-174194-2

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 13:42	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 18:56	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:14	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:26	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:30	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 03:36	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:18	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:09	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:13		
					(End)	12/03/19 12:17		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (6-12)D

Lab Sample ID: 500-174194-3

Date Collected: 11/26/19 09:53

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 14:08	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 19:24	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:17	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:28	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:34	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 03:40	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:22	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:10	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:17		
					(End)	12/03/19 12:21		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 14:33	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 16:39	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:21	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 10:39	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (12-18)

Lab Sample ID: 500-174194-4

Date Collected: 11/26/19 10:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:30	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Date Collected: 11/26/19 10:06

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:38	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 03:52	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:25	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:12	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 12:21 (End) 12/03/19 12:25	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B05 (18-24)

Lab Sample ID: 500-174194-5

Date Collected: 11/26/19 10:06

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 14:59	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 17:06	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:25	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 10:43	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:32	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Date Collected: 11/26/19 10:08

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:42	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 03:57	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:28	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:13	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 12:25 (End) 12/03/19 12:29	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B05 (24-30)

Lab Sample ID: 500-174194-6

Date Collected: 11/26/19 10:08

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 15:24	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 17:34	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:29	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 10:55	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:34	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311	DL		519571	12/09/19 14:10	GCA	TAL CHI
TCLP	Analysis	8260B	DL	5000	519841	12/11/19 02:40	EMA	TAL CHI
TCLP	Leach	1311			519571	12/09/19 14:10	GCA	TAL CHI
TCLP	Analysis	8260B		50	519909	12/11/19 11:39	PMF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3510C			519101	12/06/19 08:39	DAK	TAL CHI
TCLP	Analysis	8270D		1	519246	12/07/19 04:47	NRJ	TAL CHI

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Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3510C			519560	12/09/19 13:27	DAK	TAL CHI
TCLP	Analysis	8081B		1	519607	12/10/19 12:47	BJH	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	8151A			519789	12/10/19 11:27	DAK	TAL CHI
TCLP	Analysis	8151		1	519870	12/11/19 08:27	JBH	TAL CHI
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:46	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:01	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:39	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:15	MJG	TAL CHI
Total/NA	Analysis	1010A		1	519839		MS	TAL CHI
					(Start)	12/10/19 13:42		
					(End)	12/10/19 15:03		
Total/NA	Prep	7.3.4			519022	12/05/19 17:51	SJP	TAL CHI
Total/NA	Analysis	7.3.4		1	519041	12/06/19 00:39	SJP	TAL CHI
Total/NA	Prep	9010B			519148	12/06/19 10:45	MS	TAL CHI
Total/NA	Analysis	9014		1	519223	12/06/19 13:25	MS	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:29		
					(End)	12/03/19 12:33		
Total/NA	Analysis	9095A		1	519599		SJP	TAL CHI
					(Start)	12/09/19 15:45		
					(End)	12/09/19 15:50		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518801	11/26/19 10:45	WRE	TAL CHI
Total/NA	Analysis	8260B		5000	519216	12/07/19 03:17	PMF	TAL CHI
Total/NA	Prep	5035	DL		518801	11/26/19 10:45	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	50000	519527	12/09/19 18:13	JDD	TAL CHI
Total/NA	Prep	3541	DL		519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D	DL	5	519624	12/10/19 02:50	NRJ	TAL CHI

Eurolins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (0-6)

Lab Sample ID: 500-174194-7

Date Collected: 11/26/19 10:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 18:01	NRJ	TAL CHI
Total/NA	Prep	3541			519604	12/09/19 16:08	ACK	TAL CHI
Total/NA	Analysis	8082A		1	519618	12/10/19 09:58	BJH	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:33	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:36	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:50	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:05	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:42	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:16	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:37		
					(End)	12/03/19 12:41		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 16:16	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 18:29	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:37	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 10:59	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (6-12)

Lab Sample ID: 500-174194-8

Date Collected: 11/26/19 11:00

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:46	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B13 (12-18)

Lab Sample ID: 500-174194-9

Date Collected: 11/26/19 11:05

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:54	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:09	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:46	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:18	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 12:41 (End) 12/03/19 12:45	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B13 (12-18)

Lab Sample ID: 500-174194-9

Date Collected: 11/26/19 11:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 16:41	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 15:17	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:41	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:03	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:48	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (18-24)

Lab Sample ID: 500-174194-10

Date Collected: 11/26/19 11:15

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 04:58	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:14	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:49	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:23	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 12:45 (End) 12/03/19 12:49	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B13 (18-24)

Lab Sample ID: 500-174194-10

Date Collected: 11/26/19 11:15

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 17:07	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 15:44	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:45	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:07	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 08:50	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:02	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:18	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519568	12/09/19 13:13	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:53	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:49		
					(End)	12/03/19 12:53		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B13 (24-30)

Lab Sample ID: 500-174194-11

Date Collected: 11/26/19 11:20

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 17:33	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 16:11	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 18:57	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:11	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:11	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:15	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:22	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 15:56	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:30	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:53		
					(End)	12/03/19 12:57		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B16 (0-6)

Lab Sample ID: 500-174194-12

Date Collected: 11/26/19 11:57

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 17:58	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 19:54	AJD	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:01	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:15	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 09:01	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Date Collected: 11/26/19 12:05

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:19	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:26	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:00	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:32	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 12:57		
					(End)	12/03/19 13:01		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (6-12)

Lab Sample ID: 500-174194-13

Date Collected: 11/26/19 12:05

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 18:24	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 13:26	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:05	EEN	TAL CHI
Total/NA	Prep	7471B			519149	12/06/19 13:50	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519537	12/09/19 09:03	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:23	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:31	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:10	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:33	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 13:01		
					(End)	12/03/19 13:05		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 18:49	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 13:54	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:09	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:19	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (12-18)

Lab Sample ID: 500-174194-14

Date Collected: 11/26/19 12:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:13	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Date Collected: 11/26/19 12:22

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:27	JEF	TAL CHI
TCLP	Leach	1311			518670	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 05:38	EEN	TAL CHI
TCLP	Leach	1311			518670	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519568	12/09/19 13:30	EEN	TAL CHI
TCLP	Leach	1311			518670	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 18:11	FXG	TAL CHI
TCLP	Leach	1311			518670	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519016	12/05/19 16:30	MJG	TAL CHI
TCLP	Analysis	7470A		1	519167	12/06/19 09:55	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 13:05		
					(End)	12/03/19 13:09		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B16 (18-24)

Lab Sample ID: 500-174194-15

Date Collected: 11/26/19 12:22

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 19:15	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 14:21	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:13	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:23	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:15	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Date Collected: 11/26/19 12:27

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:31	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:47	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:13	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:35	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 13:09 (End) 12/03/19 13:13	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B16 (24-30)

Lab Sample ID: 500-174194-16

Date Collected: 11/26/19 12:27

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519068	12/06/19 15:50	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519291	12/07/19 14:49	NRJ	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:17	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:27	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:21	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			519571	12/09/19 14:10	GCA	TAL CHI
TCLP	Analysis	8260B		50	520187	12/12/19 17:41	PMF	TAL CHI
TCLP	Leach	1311	DL		519571	12/09/19 14:10	GCA	TAL CHI
TCLP	Analysis	8260B	DL	500	520187	12/12/19 18:05	PMF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3510C			519101	12/06/19 08:39	DAK	TAL CHI
TCLP	Analysis	8270D		1	519246	12/07/19 05:16	NRJ	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3510C			519560	12/09/19 13:27	DAK	TAL CHI
TCLP	Analysis	8081B		1	519607	12/10/19 13:08	BJH	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	8151A			519789	12/10/19 11:27	DAK	TAL CHI
TCLP	Analysis	8151		1	519870	12/11/19 08:47	JBH	TAL CHI
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:35	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:51	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:17	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:36	MJG	TAL CHI
Total/NA	Analysis	1010A		1	519839		MS	TAL CHI
					(Start)	12/10/19 15:03		
					(End)	12/10/19 16:25		
Total/NA	Prep	7.3.4			519022	12/05/19 17:51	SJP	TAL CHI
Total/NA	Analysis	7.3.4		1	519041	12/06/19 00:45	SJP	TAL CHI
Total/NA	Prep	9010B			519148	12/06/19 10:45	MS	TAL CHI
Total/NA	Analysis	9014		1	519223	12/06/19 13:25	MS	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 13:13		
					(End)	12/03/19 13:17		
Total/NA	Analysis	9095A		1	519599		SJP	TAL CHI
					(Start)	12/09/19 15:47		
					(End)	12/09/19 15:52		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518801	11/26/19 13:12	WRE	TAL CHI
Total/NA	Analysis	8260B		5000	519216	12/07/19 03:42	PMF	TAL CHI
Total/NA	Prep	5035	DL		518801	11/26/19 13:12	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	50000	519527	12/09/19 18:40	JDD	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519624	12/10/19 04:11	NRJ	TAL CHI

Eurolins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (0-6)

Lab Sample ID: 500-174194-17

Date Collected: 11/26/19 13:12

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			519604	12/09/19 16:08	ACK	TAL CHI
Total/NA	Analysis	8082A		1	519618	12/10/19 10:13	BJH	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:21	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:24	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B06 (6-12)

Lab Sample ID: 500-174194-18

Date Collected: 11/26/19 13:23

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:39	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 04:56	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:20	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 13:21		
					(End)	12/03/19 13:25		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B06 (6-12)

Lab Sample ID: 500-174194-18

Date Collected: 11/26/19 13:23

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519228	12/07/19 01:51	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 18:42	AJD	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:25	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:26	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (12-18)

Lab Sample ID: 500-174194-19

Date Collected: 11/26/19 13:30

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:44	JEF	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 05:00	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519568	12/09/19 13:26	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:24	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:40	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384	(Start) 12/03/19 13:29 (End) 12/03/19 13:33	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B06 (12-18)

Lab Sample ID: 500-174194-19

Date Collected: 11/26/19 13:30

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519228	12/07/19 02:16	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 19:06	AJD	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:29	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:31	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:28	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518956	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519239	12/06/19 15:37	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519678	12/10/19 05:48	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518668	12/04/19 11:09	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6010B		1	519450	12/07/19 05:04	EEN	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:09	GCA	TAL CHI
TCLP	Prep	3010A			518997	12/05/19 15:44	BDE	TAL CHI
TCLP	Analysis	6020A		1	519764	12/09/19 16:27	FXG	TAL CHI
TCLP	Leach	1311			518668	12/04/19 11:09	GCA	TAL CHI
TCLP	Prep	7470A			519138	12/06/19 09:20	MJG	TAL CHI
TCLP	Analysis	7470A		1	519550	12/09/19 10:41	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 13:33		
					(End)	12/03/19 13:37		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B06 (18-24)

Lab Sample ID: 500-174194-20

Date Collected: 11/26/19 13:41

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519228	12/07/19 02:41	PMF	TAL CHI
Total/NA	Prep	3541			519281	12/06/19 18:03	ACK	TAL CHI
Total/NA	Analysis	8270D		1	519297	12/07/19 19:30	AJD	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519451	12/06/19 19:33	EEN	TAL CHI
Total/NA	Prep	3050B			519025	12/05/19 18:06	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519568	12/09/19 11:43	EEN	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:30	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			518974	12/05/19 11:55	BEC	TAL CHI
SPLP East	Prep	3010A			519240	12/06/19 15:39	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519564	12/09/19 12:41	JEF	TAL CHI
TCLP	Leach	1311			518671	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518998	12/05/19 15:46	BDE	TAL CHI
TCLP	Analysis	6010B		1	519452	12/06/19 14:27	EEN	TAL CHI
TCLP	Leach	1311			518671	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518998	12/05/19 15:46	BDE	TAL CHI
TCLP	Analysis	6020A		1	519532	12/06/19 22:16	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518671	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	3010A			518998	12/05/19 15:46	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 18:22	FXG	TAL CHI
TCLP	Leach	1311			518671	12/04/19 11:00	GCA	TAL CHI
TCLP	Prep	7470A			519016	12/05/19 16:30	MJG	TAL CHI
TCLP	Analysis	7470A		1	519167	12/06/19 09:46	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518384		MTB	TAL CHI
					(Start)	12/03/19 13:37		
					(End)	12/03/19 13:41		
Total/NA	Analysis	Moisture		1	518407	12/03/19 10:48	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B06 (24-30)

Lab Sample ID: 500-174194-21

Date Collected: 11/26/19 13:45

Matrix: Solid

Date Received: 11/26/19 15:25

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			518917	11/27/19 17:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519228	12/07/19 03:07	PMF	TAL CHI
Total/NA	Prep	3541			518838	12/05/19 07:47	DX	TAL CHI
Total/NA	Analysis	8270D		1	519005	12/06/19 01:03	NRJ	TAL CHI
Total/NA	Prep	3050B			519024	12/05/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519450	12/07/19 02:29	EEN	TAL CHI
Total/NA	Prep	3050B			519024	12/05/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519679	12/09/19 19:50	JEF	TAL CHI
Total/NA	Prep	3050B			519024	12/05/19 18:00	BDE	TAL CHI
Total/NA	Analysis	6010B		10	519679	12/09/19 19:54	JEF	TAL CHI
Total/NA	Prep	7471B			519538	12/09/19 15:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	519785	12/10/19 09:32	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174194-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1010A		Solid	Flashpoint
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7.3.4	7.3.4	Solid	Sulfide, Reactive
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
9014	9010B	Solid	Cyanide, Reactive
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6
Phone: 708.534.5200 Fax: 708.53



500-174194 COC

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174194
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 4.939, 3.0

Client: <u>E+E</u>		Client Project # <u>10093410447.01</u>		Preservative		Parameter										Preservative Key	
Project Name <u>176001-W0475</u>		Project Location/State <u>Chicago, IL</u>		Lab Project #		Lab PM <u>R. Wright</u>											
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/TCPP Metals	pH	Percent Solids	Waste Disposal					Comments
1		2615V2-AI-B05(0-6)	11/26/19	0900	5	S	X	X	X	X	X						
2		2615V2-AI-B05(6-12)	11/26/19	0953	5	S	X	X	X	X	X						
3		2615V2-AI-B05(6-12)D	11/26/19	0953	5	S	X	X	X	X	X						
4		2615V2-AI-B05(12-18)	11/26/19	1000	5	S	X	X	X	X	X						
5		2615V2-AI-B05(18-24)	11/26/19	1006	5	S	X	X	X	X	X						
6		2615V2-AI-B05(24-30)	11/26/19	1008	4	S	X	X	X	X	X						
7		2615V2-AI-B13(0-6)	11/26/19	1045	5	S	X	X	X	X	X	X					
8		2615V2-AI-B13(6-12)	11/26/19	1100	5	S	X	X	X	X	X						
9		2615V2-AI-B13(12-18)	11/26/19	1105	5	S	X	X	X	X	X						

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company <u>E+E</u> Date <u>11/26/19</u> Time <u>1411</u>	Received By <u>[Signature]</u> Company <u>TA</u> Date <u>11/26/19</u> Time <u>1411</u>
Relinquished By <u>[Signature]</u> Company <u>TA</u> Date <u>11/26/19</u> Time <u>1525</u>	Received By <u>[Signature]</u> Company <u>TA-CHT</u> Date <u>11/26/19</u> Time <u>1525</u>
Relinquished By _____ Company _____ Date _____ Time _____	Received By _____ Company _____ Date _____ Time _____

Lab Courier: TA
Shipped: _____
Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174194
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter										Preservative Key	
E+E		1009341.0447.01														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #															
176-001-W047E																	
Project Location/State		Lab PM															
Chicago, IL		R. Wright															
Sampler																	
AH																	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOC	SVOC	Total/Leach Metals	pH	Percent Solids	Waste Disposal	Comments				
10		2615V2-AI-B13(18-24)	11/26/19	1115	5	S	X	X	X	X	X						
11		2615V2-AI-B13(24-30)	11/26/19	1120	5	S	X	X	X	X	X						
12		2615V2-AI-B16(0-6)	11/26/19	1157	5	S	X	X	X	X	X						
13		2615V2-AI-B16(6-12)	11/26/19	1205	5	S	X	X	X	X	X						
14		2615V2-AI-B16(12-18)	11/26/19	1212	5	S	X	X	X	X	X						
15		2615V2-AI-B16(18-24)	11/26/19	1222	5	S	X	X	X	X	X						
16		2615V2-AI-B16(24-30)	11/26/19	1227	5	S	X	X	X	X	X						
17		2615V2-AI-B06(0-6)	11/26/19	1312	7	S	X	X	X	X	X	X					
18		2615V2-AI-B06(6-12)	11/26/19	1323	5	S	X	X	X	X	X						
19		2615V2-AI-B06(12-18)	11/26/19	1330	5	S	X	X	X	X	X						

Turnaround Time Required (Business Days): 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>J. Hughes</u> Company: <u>E+E</u> Date: <u>11/26/19</u> Time: <u>1411</u>	Received By: <u>[Signature]</u> Company: <u>TH</u> Date: <u>11/26/19</u> Time: <u>1411</u>	Lab Courier: <u>TH</u>
Relinquished By: <u>[Signature]</u> Company: <u>TH</u> Date: <u>11/26/19</u> Time: <u>1525</u>	Received By: <u>[Signature]</u> Company: <u>TH</u> Date: <u>11/26/19</u> Time: <u>1525</u>	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments:

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174194
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter								Preservative Key	
E+E		1009341.0447.01												1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM							
176-001-W047E		Chicago, IL				A.H. JH		R. Wright							
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOC	SVOC	Total/TCLP Metals	pH	Percent Solids				
			Date	Time											
20		2615V2-AI-B06(18-24)	11/26/19	1341	5	S	X	X	X	X	X				
21		2615V2-AI-B06(24-30)	11/26/19	1345	5	S	X	X	X	X	X				
<div style="border: 1px solid black; width: 100%; height: 100%; transform: rotate(-30deg); opacity: 0.5;"></div>															

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other
 Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <i>J. Hughes</i>	Company: E+E	Date: 11/26/19	Time: 1411	Received By: <i>JH</i>	Company: E+E	Date: 11/26/19	Time: 1411	Lab Courier: <i>TA</i>
Relinquished By: <i>JH</i>	Company: E+E	Date: 11/26/19	Time: 1525	Received By: <i>John Smith</i>	Company: TA-CORE	Date: 11/26/19	Time: 1525	Shipped: _____
Relinquished By: _____	Company: _____	Date: _____	Time: _____	Received By: _____	Company: _____	Date: _____	Time: _____	Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174194-1

Login Number: 174194

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9,3.9,3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174357-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/18/2019 3:35:06 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Job ID: 500-174357-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174357-1

Receipt

The samples were received on 12/2/2019 3:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 4.3° C, 6.2° C and 6.8° C.

GC/MS VOA

Method 8260B: One Surrogate (Dibromofluoromethane) recovery for the following sample was outside control limits: 2615V2-AI-B24 (6-12) (500-174357-7). Evidence of matrix interference is present due to the basic pH 11 of the sample. The sample was re-analyzed and similar results were obtained.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range for 8260B/5035A_FM: 2615V2-AI-B17 (0-6) (500-174357-11) and 2615V2-AI-B14 (0-6) (500-174357-16). Elevated reporting limits (RLs) are provided.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range for method 8260B/5030B_Leach/1311_Z: 2615V2-AI-B14 (0-6) (500-174357-16). Elevated reporting limits (RLs) are provided.

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for 519634 recovered outside control limits for the following analytes: Bromomethane and Chloroethane. Bromomethane and Chloroethane were biased high in the LCS while Chloroethane was biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following samples were diluted due to the abundance of non-target analytes (very large ketone peaks): 2615V2-AI-B24 (0-6) (500-174357-6), 2615V2-AI-B24 (6-12) (500-174357-7) and 2615V2-AI-B24 (12-18) (500-174357-8). Elevated reporting limits (RLs) are provided.

Method 8270D: Surrogate recovery for the following samples were outside control limits: 2615V2-AI-B24 (0-6) (500-174357-6), 2615V2-AI-B24 (6-12) (500-174357-7) and 2615V2-AI-B24 (12-18) (500-174357-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-519914 and analytical batch 500-520171 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene, Bis(2-chloroethyl)ether, 2-Chlorophenol and 2,4-Dimethylphenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The following matrix spike (MS) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-174357-E-1-K MS)

Method 8270D: The following samples contained one surrogate outside acceptance limits: 2615V2-AI-B14 (0-6) (500-174357-16) and (500-174357-E-1-K MS). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8151A: The continuing calibration verification (CCV) associated with batch 500-519870 recovered above the upper control limit for Silvex (2,4,5-TP). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 2615V2-AI-B14 (0-6) (500-174357-16) and (CCV 500-519870/24).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Job ID: 500-174357-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

Method 6010B: The laboratory control sample (LCS) for preparation batch 500-518975 and 500-519241 and analytical batch 500-519680 recovered outside control limits for the following analytes: zinc. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

Method 9014: Total cyanide analysis was performed for sample 2615V2-AI-B14 (0-6) (500-174357-16), and the result obtained was a non-detect. As such, the reactive cyanide analysis was not performed, and the result for this analyte was reported as non-detect.

Method 9034: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-519622 and analytical batch 500-519646 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(500-174357-G-16-C MS) and (500-174357-G-16-D MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.0013	J	0.0018	0.00081	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.044	F2 F1	0.043	0.0060	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J F2 F1	0.043	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.68	J F1	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.0	F1	0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	53		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.78		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	31000	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	17	F1	0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	41		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.75	F1	0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.5		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	1600		62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1	F1	0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.82		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.076	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.85		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.040		0.021	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.044	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0060	J	0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.073		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.30	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	29	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (6-12) (Continued)

Lab Sample ID: 500-174357-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	350	B	0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3500		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.88		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.020	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.029		0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.043	J	0.083	0.0075	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0061	J	0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.069		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.76		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	33	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	350	B	0.62	0.090	mg/Kg	1	☼	6010B	Total/NA
Nickel	38		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.73		0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	54		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (12-18) (Continued)

Lab Sample ID: 500-174357-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.097	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.029		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.036	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.070		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.56	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.4		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	50000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	30	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3600		30	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.62		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.30	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.033		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.080	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.047		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.022	J	0.081	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.048		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.012	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (24-30) (Continued)

Lab Sample ID: 500-174357-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.53	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.0		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	31	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.36	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	220		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.71		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.095	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.068		0.024	0.010	mg/Kg	1	☼	8260B	Total/NA
Benzene	0.0012	J	0.0024	0.00060	mg/Kg	1	☼	8260B	Total/NA
Toluene	0.00076	J	0.0024	0.00060	mg/Kg	1	☼	8260B	Total/NA
Trichloroethene	0.0053		0.0024	0.00080	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.0014	J	0.0047	0.00076	mg/Kg	1	☼	8260B	Total/NA
Isophorone	0.77	J	0.91	0.20	mg/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	0.062	J	0.37	0.033	mg/Kg	5	☼	8270D	Total/NA
Acenaphthylene	0.049	J	0.18	0.024	mg/Kg	5	☼	8270D	Total/NA
Acenaphthene	0.29		0.18	0.033	mg/Kg	5	☼	8270D	Total/NA
Fluorene	0.18		0.18	0.026	mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	1.5		0.18	0.025	mg/Kg	5	☼	8270D	Total/NA
Anthracene	0.40		0.18	0.030	mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	2.0		0.18	0.034	mg/Kg	5	☼	8270D	Total/NA
Pyrene	1.8		0.18	0.036	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	0.76		0.18	0.024	mg/Kg	5	☼	8270D	Total/NA
Chrysene	0.92		0.18	0.050	mg/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1.0		0.18	0.039	mg/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (0-6) (Continued)

Lab Sample ID: 500-174357-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.61		0.18	0.054	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	0.76		0.18	0.035	mg/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.25		0.18	0.047	mg/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.19		0.18	0.058	mg/Kg	5	☼	8270D	Total/NA
Antimony	0.56	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.4		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	180000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.4		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.6		0.54	0.14	mg/Kg	2	☼	6010B	Total/NA
Copper	14	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	5500	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.54	0.25	mg/Kg	2	☼	6010B	Total/NA
Magnesium	64000		11	5.3	mg/Kg	2	☼	6010B	Total/NA
Manganese	300	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.7		1.1	0.31	mg/Kg	2	☼	6010B	Total/NA
Potassium	950		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	0.90		0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	420		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	42		2.2	0.94	mg/Kg	2	☼	6010B	Total/NA
Barium	0.29	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.17	J	0.50	0.050	mg/L	1		6010B	TCLP
Chromium	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.028		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	11.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.021		0.0064	0.0028	mg/Kg	1	☼	8260B	Total/NA
Acetone	0.17		0.026	0.011	mg/Kg	1	☼	8260B	Total/NA
Benzene	0.0018	J	0.0026	0.00065	mg/Kg	1	☼	8260B	Total/NA
cis-1,2-Dichloroethene	0.0027		0.0026	0.00071	mg/Kg	1	☼	8260B	Total/NA
Toluene	0.0018	J	0.0026	0.00064	mg/Kg	1	☼	8260B	Total/NA
Trichloroethene	0.0023	J	0.0026	0.00086	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.0033	J	0.0051	0.00082	mg/Kg	1	☼	8260B	Total/NA
Isophorone	0.80	J	0.91	0.20	mg/Kg	5	☼	8270D	Total/NA
Naphthalene	0.17	J	0.18	0.028	mg/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	0.13	J	0.37	0.033	mg/Kg	5	☼	8270D	Total/NA
Acenaphthylene	0.042	J	0.18	0.024	mg/Kg	5	☼	8270D	Total/NA
Acenaphthene	0.31		0.18	0.033	mg/Kg	5	☼	8270D	Total/NA
Dibenzofuran	0.24	J	0.91	0.21	mg/Kg	5	☼	8270D	Total/NA
Fluorene	0.36		0.18	0.025	mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	2.0		0.18	0.025	mg/Kg	5	☼	8270D	Total/NA
Anthracene	0.56		0.18	0.030	mg/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (6-12) (Continued)

Lab Sample ID: 500-174357-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	2.1		0.18	0.034	mg/Kg	5	☼	8270D	Total/NA
Pyrene	1.9		0.18	0.036	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	0.87		0.18	0.024	mg/Kg	5	☼	8270D	Total/NA
Chrysene	1.0		0.18	0.049	mg/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1.3		0.18	0.039	mg/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.57		0.18	0.053	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	0.77		0.18	0.035	mg/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.28		0.18	0.047	mg/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.21		0.18	0.058	mg/Kg	5	☼	8270D	Total/NA
Antimony	0.57	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.7		0.51	0.17	mg/Kg	1	☼	6010B	Total/NA
Barium	79		0.51	0.058	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.20	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22	B	0.10	0.018	mg/Kg	1	☼	6010B	Total/NA
Calcium	160000	B	100	17	mg/Kg	10	☼	6010B	Total/NA
Chromium	8.8		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.8		0.51	0.13	mg/Kg	2	☼	6010B	Total/NA
Copper	12	B	0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	5400	B	10	5.3	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.51	0.24	mg/Kg	2	☼	6010B	Total/NA
Magnesium	58000		10	5.1	mg/Kg	2	☼	6010B	Total/NA
Manganese	270	B	0.51	0.074	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.9		1.0	0.30	mg/Kg	2	☼	6010B	Total/NA
Potassium	970		26	9.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.36	J	0.51	0.30	mg/Kg	1	☼	6010B	Total/NA
Silver	0.74		0.26	0.066	mg/Kg	1	☼	6010B	Total/NA
Sodium	490		51	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.26	0.060	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		2.0	0.90	mg/Kg	2	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.13	J	0.50	0.050	mg/L	1		6010B	TCLP
Chromium	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.020		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	11.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.041		0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
Trichloroethene	0.0020		0.0019	0.00063	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.17	J	0.18	0.028	mg/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	0.15	J	0.36	0.033	mg/Kg	5	☼	8270D	Total/NA
Acenaphthylene	0.043	J	0.18	0.024	mg/Kg	5	☼	8270D	Total/NA
Acenaphthene	0.25		0.18	0.032	mg/Kg	5	☼	8270D	Total/NA
Dibenzofuran	0.22	J	0.90	0.21	mg/Kg	5	☼	8270D	Total/NA
Fluorene	0.29		0.18	0.025	mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	1.8		0.18	0.025	mg/Kg	5	☼	8270D	Total/NA
Anthracene	0.50		0.18	0.030	mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	1.9		0.18	0.033	mg/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (12-18) (Continued)

Lab Sample ID: 500-174357-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	1.7		0.18	0.036	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	0.76		0.18	0.024	mg/Kg	5	☼	8270D	Total/NA
Chrysene	0.88		0.18	0.049	mg/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.65		0.18	0.039	mg/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.79		0.18	0.053	mg/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	0.73		0.18	0.035	mg/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.25		0.18	0.046	mg/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.14	J	0.18	0.058	mg/Kg	5	☼	8270D	Total/NA
Antimony	0.74	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.4		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	69		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.36		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	16		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	180000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.7		0.53	0.14	mg/Kg	2	☼	6010B	Total/NA
Copper	14	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	5700	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	20		0.53	0.25	mg/Kg	2	☼	6010B	Total/NA
Magnesium	63000		11	5.3	mg/Kg	2	☼	6010B	Total/NA
Manganese	330	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.4		1.1	0.31	mg/Kg	2	☼	6010B	Total/NA
Potassium	900		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54		0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	0.73		0.27	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	490		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		2.1	0.93	mg/Kg	2	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP
Chromium	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.046	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.021		0.016	0.0055	mg/Kg	1	☼	7471B	Total/NA
pH	11.6		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.027	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.050		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.55	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.0		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	17		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	63000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (18-24) (Continued)

Lab Sample ID: 500-174357-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	30	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	350	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.85		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	280		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.66		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.035		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.061		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.029		0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.031	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.075		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.55	J	1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.3		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	46		0.62	0.071	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Cobalt	17		0.31	0.082	mg/Kg	1	☼	6010B	Total/NA
Copper	34	B	0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	12	6.5	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.62	0.091	mg/Kg	1	☼	6010B	Total/NA
Nickel	40		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.62	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Sodium	220		62	9.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.31	0.074	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (24-30) (Continued)

Lab Sample ID: 500-174357-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	60		1.2	0.55	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.10	J B *	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.088		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174357-1	2615V2-AI-B18 (0-6)	Solid	12/02/19 09:30	12/02/19 15:45	
500-174357-2	2615V2-AI-B18 (6-12)	Solid	12/02/19 09:40	12/02/19 15:45	
500-174357-3	2615V2-AI-B18 (12-18)	Solid	12/02/19 09:50	12/02/19 15:45	
500-174357-4	2615V2-AI-B18 (18-24)	Solid	12/02/19 10:00	12/02/19 15:45	
500-174357-5	2615V2-AI-B18 (24-30)	Solid	12/02/19 10:10	12/02/19 15:45	
500-174357-6	2615V2-AI-B24 (0-6)	Solid	12/02/19 11:00	12/02/19 15:45	
500-174357-7	2615V2-AI-B24 (6-12)	Solid	12/02/19 11:10	12/02/19 15:45	
500-174357-8	2615V2-AI-B24 (12-18)	Solid	12/02/19 11:20	12/02/19 15:45	
500-174357-9	2615V2-AI-B24 (18-24)	Solid	12/02/19 11:30	12/02/19 15:45	
500-174357-10	2615V2-AI-B24 (24-30)	Solid	12/02/19 11:40	12/02/19 15:45	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Date Collected: 12/02/19 09:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 77.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Bromomethane	<0.0046 *		0.0046	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Vinyl chloride	0.0013	J	0.0018	0.00081	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 02:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	12/02/19 18:00	12/10/19 02:25	1
4-Bromofluorobenzene (Surr)	107		75 - 131	12/02/19 18:00	12/10/19 02:25	1
Dibromofluoromethane	104		75 - 126	12/02/19 18:00	12/10/19 02:25	1
Toluene-d8 (Surr)	95		75 - 124	12/02/19 18:00	12/10/19 02:25	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.22	F2 F1	0.22	0.095	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Bis(2-chloroethyl)ether	<0.22	F2 * F1	0.22	0.064	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
1,3-Dichlorobenzene	<0.22	F2 F1	0.22	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
1,4-Dichlorobenzene	<0.22	F2 F1	0.22	0.055	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Date Collected: 12/02/19 09:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 77.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.22	F2 F1	0.22	0.051	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2-Methylphenol	<0.22	F2 F1	0.22	0.069	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,2'-oxybis[1-chloropropane]	<0.22	F2 F1	0.22	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
N-Nitrosodi-n-propylamine	<0.086	F2 F1	0.086	0.052	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Hexachloroethane	<0.22	F2 F1	0.22	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2-Chlorophenol	<0.22	F2 * F1	0.22	0.073	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Nitrobenzene	<0.043	F2 F1	0.043	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Bis(2-chloroethoxy)methane	<0.22	F2 F1	0.22	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
1,2,4-Trichlorobenzene	<0.22	F2 F1	0.22	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Isophorone	<0.22	F1	0.22	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,4-Dimethylphenol	<0.43	* F1	0.43	0.16	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Hexachlorobutadiene	<0.22	F2 F1	0.22	0.067	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Naphthalene	<0.043	F2 F1	0.043	0.0066	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,4-Dichlorophenol	<0.43	F2 F1	0.43	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4-Chloroaniline	<0.86	F2 F1	0.86	0.20	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,4,6-Trichlorophenol	<0.43	F2 F1	0.43	0.15	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,4,5-Trichlorophenol	<0.43	F2 F1	0.43	0.098	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Hexachlorocyclopentadiene	<0.86	* F1	0.86	0.25	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2-Methylnaphthalene	<0.086	F2 F1	0.086	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2-Nitroaniline	<0.22	F2 F1	0.22	0.058	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2-Chloronaphthalene	<0.22	F2 F1	0.22	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4-Chloro-3-methylphenol	<0.43	F2 F1	0.43	0.15	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,6-Dinitrotoluene	<0.22	F2 F1	0.22	0.084	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2-Nitrophenol	<0.43	F2 F1	0.43	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Dimethyl phthalate	<0.22	F2 F1	0.22	0.056	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,4-Dinitrophenol	<0.86	F1	0.86	0.75	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Acenaphthylene	<0.043	F2 F1	0.043	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
2,4-Dinitrotoluene	<0.22	F2 F1	0.22	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Acenaphthene	<0.043	F2 F1	0.043	0.0077	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Dibenzofuran	<0.22	F2 F1	0.22	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4-Nitrophenol	<0.86	F2	0.86	0.41	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Fluorene	<0.043	F2 F1	0.043	0.0060	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4-Nitroaniline	<0.43	F2 F1	0.43	0.18	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4-Bromophenyl phenyl ether	<0.22	F2 F1	0.22	0.057	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Hexachlorobenzene	<0.086	F2 F1	0.086	0.0099	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Diethyl phthalate	<0.22	F2 F1	0.22	0.073	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4-Chlorophenyl phenyl ether	<0.22	F2 F1	0.22	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Pentachlorophenol	<0.86	F2	0.86	0.69	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
N-Nitrosodiphenylamine	<0.22	F1	0.22	0.051	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
4,6-Dinitro-2-methylphenol	<0.86	F1	0.86	0.34	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Phenanthrene	0.044	F2 F1	0.043	0.0060	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Anthracene	<0.043	F2 F1	0.043	0.0072	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Carbazole	<0.22	F1	0.22	0.11	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Di-n-butyl phthalate	<0.22	F1	0.22	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Fluoranthene	<0.043	F2 F1	0.043	0.0080	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Pyrene	<0.043		0.043	0.0085	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Butyl benzyl phthalate	<0.22	F1	0.22	0.082	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Benzof[a]anthracene	<0.043	F2 F1	0.043	0.0058	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Date Collected: 12/02/19 09:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 77.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.018	J F2 F1	0.043	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Bis(2-ethylhexyl) phthalate	<0.22	F1	0.22	0.078	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Di-n-octyl phthalate	<0.22	F2 F1	0.22	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Benzo[b]fluoranthene	<0.043	F2 F1	0.043	0.0093	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Benzo[k]fluoranthene	<0.043	F2 F1	0.043	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Benzo[a]pyrene	<0.043	F1	0.043	0.0083	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Indeno[1,2,3-cd]pyrene	<0.043	F1	0.043	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Dibenz(a,h)anthracene	<0.043	F1	0.043	0.0083	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Benzo[g,h,i]perylene	<0.043	F2 F1	0.043	0.014	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
3 & 4 Methylphenol	<0.22	F2 F1	0.22	0.071	mg/Kg	☼	12/11/19 07:45	12/12/19 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		31 - 166				12/11/19 07:45	12/12/19 13:34	1
Phenol-d5	54		30 - 153				12/11/19 07:45	12/12/19 13:34	1
Nitrobenzene-d5	67		37 - 147				12/11/19 07:45	12/12/19 13:34	1
2-Fluorobiphenyl	71		43 - 145				12/11/19 07:45	12/12/19 13:34	1
2,4,6-Tribromophenol	43		31 - 143				12/11/19 07:45	12/12/19 13:34	1
Terphenyl-d14	74		42 - 157				12/11/19 07:45	12/12/19 13:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J F1	1.2	0.24	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Arsenic	7.0	F1	0.62	0.21	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Barium	53		0.62	0.071	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Beryllium	0.78		0.25	0.058	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Boron	17		3.1	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Cadmium	0.15	B	0.12	0.022	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Calcium	31000	B	12	2.1	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Chromium	18		0.62	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Cobalt	15		0.31	0.081	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Copper	31	B	0.62	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Iron	21000	B	12	6.5	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Lead	17	F1	0.31	0.14	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Magnesium	20000		6.2	3.1	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Manganese	310	B	0.62	0.090	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Nickel	41		0.62	0.18	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Potassium	3800		31	11	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Selenium	0.75	F1	0.62	0.36	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Silver	2.5		0.31	0.080	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Sodium	1600		62	9.2	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Thallium	1.1	F1	0.62	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Vanadium	20		0.31	0.073	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1
Zinc	51		1.2	0.54	mg/Kg	☼	12/06/19 17:27	12/11/19 03:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.82		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:21	1
Boron	0.076	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:21	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Date Collected: 12/02/19 09:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 77.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:21	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:21	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:21	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:21	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:21	1
Manganese	3.0		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:21	1
Nickel	0.021	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:21	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:21	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:21	1
Zinc	<0.50	*	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:21	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.85		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 19:40	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 18:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 18:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.021	0.0068	mg/Kg	☼	12/10/19 13:20	12/11/19 07:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/04/19 13:04	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Bromomethane	<0.0041 *		0.0041	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Chloroethane	<0.0041 *		0.0041	0.0012	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/02/19 18:00	12/10/19 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	12/02/19 18:00	12/10/19 02:50	1
4-Bromofluorobenzene (Surr)	104		75 - 131	12/02/19 18:00	12/10/19 02:50	1
Dibromofluoromethane	106		75 - 126	12/02/19 18:00	12/10/19 02:50	1
Toluene-d8 (Surr)	91		75 - 124	12/02/19 18:00	12/10/19 02:50	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Bis(2-chloroethyl)ether	<0.21 *		0.21	0.061	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,4-Dimethylphenol	<0.41	*	0.41	0.15	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Hexachlorocyclopentadiene	<0.82	*	0.82	0.23	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2-Methylnaphthalene	0.044	J	0.082	0.0075	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Fluorene	0.0060	J	0.041	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Phenanthrene	0.073		0.041	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		31 - 166				12/11/19 07:45	12/12/19 14:33	1
Phenol-d5	83		30 - 153				12/11/19 07:45	12/12/19 14:33	1
Nitrobenzene-d5	106		37 - 147				12/11/19 07:45	12/12/19 14:33	1
2-Fluorobiphenyl	88		43 - 145				12/11/19 07:45	12/12/19 14:33	1
2,4,6-Tribromophenol	57		31 - 143				12/11/19 07:45	12/12/19 14:33	1
Terphenyl-d14	120		42 - 157				12/11/19 07:45	12/12/19 14:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.2	0.22	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Arsenic	8.0		0.58	0.20	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Barium	46		0.58	0.066	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Beryllium	0.63		0.23	0.054	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Boron	17		2.9	0.27	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Cadmium	0.15	B	0.12	0.021	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Calcium	53000	B	120	20	mg/Kg	☼	12/06/19 17:27	12/11/19 12:17	10
Chromium	16		0.58	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Copper	29	B	0.58	0.16	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Iron	21000	B	12	6.0	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Lead	15		0.29	0.13	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Magnesium	23000		5.8	2.9	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Manganese	350	B	0.58	0.084	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Nickel	36		0.58	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Potassium	3500		29	10	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Selenium	0.57	J	0.58	0.34	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Silver	2.1		0.29	0.074	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Sodium	200		58	8.5	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Thallium	0.88		0.58	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1
Zinc	56		1.2	0.51	mg/Kg	☼	12/06/19 17:27	12/11/19 04:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:25	1
Boron	0.083	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:25	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:25	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:25	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:25	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:25	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:25	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:25	1
Nickel	0.039		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:25	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:25	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:25	1
Zinc	<0.50	*	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:25	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.020	J	0.025	0.010	mg/L		12/07/19 21:30	12/10/19 19:44	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 18:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 18:56	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.019	0.0062	mg/Kg	☼	12/10/19 13:20	12/11/19 07:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/04/19 13:11	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Date Collected: 12/02/19 09:50

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Acetone	0.029		0.017	0.0075	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 03:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	12/02/19 18:00	12/10/19 03:16	1
4-Bromofluorobenzene (Surr)	100		75 - 131	12/02/19 18:00	12/10/19 03:16	1
Dibromofluoromethane	104		75 - 126	12/02/19 18:00	12/10/19 03:16	1
Toluene-d8 (Surr)	94		75 - 124	12/02/19 18:00	12/10/19 03:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Bis(2-chloroethyl)ether	<0.21	*	0.21	0.061	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Date Collected: 12/02/19 09:50

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,4-Dimethylphenol	<0.41	*	0.41	0.16	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2-Methylnaphthalene	0.043	J	0.083	0.0075	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Fluorene	0.0061	J	0.041	0.0058	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Phenanthrene	0.069		0.041	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Date Collected: 12/02/19 09:50

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.018	J	0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	95		31 - 166				12/11/19 07:45	12/12/19 14:56	1
Phenol-d5	92		30 - 153				12/11/19 07:45	12/12/19 14:56	1
Nitrobenzene-d5	130		37 - 147				12/11/19 07:45	12/12/19 14:56	1
2-Fluorobiphenyl	110		43 - 145				12/11/19 07:45	12/12/19 14:56	1
2,4,6-Tribromophenol	83		31 - 143				12/11/19 07:45	12/12/19 14:56	1
Terphenyl-d14	126		42 - 157				12/11/19 07:45	12/12/19 14:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.2	0.24	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Arsenic	8.0		0.62	0.21	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Barium	47		0.62	0.070	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Beryllium	0.76		0.25	0.058	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Boron	18		3.1	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Cadmium	0.16	B	0.12	0.022	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Calcium	54000	B	120	21	mg/Kg	☼	12/06/19 17:27	12/11/19 12:21	10
Chromium	16		0.62	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Cobalt	14		0.31	0.081	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Copper	33	B	0.62	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Iron	22000	B	12	6.4	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Lead	15		0.31	0.14	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Manganese	350	B	0.62	0.090	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Nickel	38		0.62	0.18	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Potassium	3700		31	11	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Selenium	0.73		0.62	0.36	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Silver	2.1		0.31	0.080	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Sodium	210		62	9.1	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Thallium	0.90		0.62	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Vanadium	20		0.31	0.073	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1
Zinc	54		1.2	0.54	mg/Kg	☼	12/06/19 17:27	12/11/19 04:29	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:38	1
Boron	0.097	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:38	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Date Collected: 12/02/19 09:50

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:38	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:38	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:38	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:38	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:38	1
Nickel	0.037		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:38	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:38	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:38	1
Zinc	0.14	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:38	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.029		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 19:48	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.020	0.0068	mg/Kg	☼	12/10/19 13:20	12/11/19 07:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/04/19 13:18	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Bromomethane	<0.0042 *		0.0042	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Chloroethane	<0.0042 *		0.0042	0.0012	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 03:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 134	12/02/19 18:00	12/10/19 03:41	1
4-Bromofluorobenzene (Surr)	106		75 - 131	12/02/19 18:00	12/10/19 03:41	1
Dibromofluoromethane	107		75 - 126	12/02/19 18:00	12/10/19 03:41	1
Toluene-d8 (Surr)	91		75 - 124	12/02/19 18:00	12/10/19 03:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Bis(2-chloroethyl)ether	<0.20 *		0.20	0.061	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2-Chlorophenol	<0.20	*	0.20	0.069	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,4-Dimethylphenol	<0.40	*	0.40	0.15	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Hexachlorocyclopentadiene	<0.82	*	0.82	0.23	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2-Methylnaphthalene	0.036	J	0.082	0.0075	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Phenanthrene	0.070		0.040	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	80		31 - 166	12/11/19 07:45	12/12/19 15:19	1
Phenol-d5	82		30 - 153	12/11/19 07:45	12/12/19 15:19	1
Nitrobenzene-d5	116		37 - 147	12/11/19 07:45	12/12/19 15:19	1
2-Fluorobiphenyl	97		43 - 145	12/11/19 07:45	12/12/19 15:19	1
2,4,6-Tribromophenol	67		31 - 143	12/11/19 07:45	12/12/19 15:19	1
Terphenyl-d14	115		42 - 157	12/11/19 07:45	12/12/19 15:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.23	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Arsenic	7.4		0.59	0.20	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Barium	46		0.59	0.067	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Beryllium	0.65		0.24	0.055	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Boron	18		3.0	0.28	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Cadmium	0.18	B	0.12	0.021	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Calcium	50000	B	120	20	mg/Kg	☼	12/06/19 17:27	12/11/19 12:26	10
Chromium	17		0.59	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Cobalt	14		0.30	0.077	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Copper	30	B	0.59	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Iron	21000	B	12	6.2	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Lead	14		0.30	0.14	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Manganese	330	B	0.59	0.086	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Potassium	3600		30	10	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Selenium	0.62		0.59	0.35	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Silver	2.1		0.30	0.076	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Sodium	200		59	8.8	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Thallium	0.89		0.59	0.30	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Vanadium	19		0.30	0.070	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1
Zinc	57		1.2	0.52	mg/Kg	☼	12/06/19 17:27	12/11/19 04:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:42	1
Boron	0.089	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:42	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:42	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:42	1
Cobalt	0.012	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:42	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:42	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:42	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:42	1
Nickel	0.033		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:42	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:42	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:42	1
Zinc	0.080	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:42	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.047		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 19:52	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.020	0.0065	mg/Kg	☼	12/10/19 13:20	12/11/19 07:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4		0.2	0.2	SU			12/04/19 13:26	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Bromomethane	<0.0045 *		0.0045	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Chloroethane	<0.0045 *		0.0045	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 04:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	12/02/19 18:00	12/10/19 04:06	1
4-Bromofluorobenzene (Surr)	105		75 - 131	12/02/19 18:00	12/10/19 04:06	1
Dibromofluoromethane	102		75 - 126	12/02/19 18:00	12/10/19 04:06	1
Toluene-d8 (Surr)	92		75 - 124	12/02/19 18:00	12/10/19 04:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Bis(2-chloroethyl)ether	<0.20 *		0.20	0.060	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2-Chlorophenol	<0.20	*	0.20	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,4-Dimethylphenol	<0.40	*	0.40	0.15	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Hexachlorocyclopentadiene	<0.81	*	0.81	0.23	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2-Methylnaphthalene	0.022	J	0.081	0.0073	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Phenanthrene	0.048		0.040	0.0056	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.012	J	0.040	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/11/19 07:45	12/12/19 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	94		31 - 166				12/11/19 07:45	12/12/19 15:42	1
Phenol-d5	83		30 - 153				12/11/19 07:45	12/12/19 15:42	1
Nitrobenzene-d5	110		37 - 147				12/11/19 07:45	12/12/19 15:42	1
2-Fluorobiphenyl	89		43 - 145				12/11/19 07:45	12/12/19 15:42	1
2,4,6-Tribromophenol	76		31 - 143				12/11/19 07:45	12/12/19 15:42	1
Terphenyl-d14	116		42 - 157				12/11/19 07:45	12/12/19 15:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.53	J	1.2	0.24	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Arsenic	8.0		0.61	0.21	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Barium	46		0.61	0.069	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Beryllium	0.71		0.24	0.057	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Boron	19		3.0	0.28	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Cadmium	0.14	B	0.12	0.022	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Calcium	51000	B	120	21	mg/Kg	☼	12/06/19 17:27	12/11/19 12:30	10
Chromium	17		0.61	0.30	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Cobalt	14		0.30	0.080	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Copper	31	B	0.61	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Iron	21000	B	12	6.3	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Lead	14		0.30	0.14	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Magnesium	22000		6.1	3.0	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Manganese	330	B	0.61	0.088	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Nickel	37		0.61	0.18	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Potassium	3800		30	11	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Selenium	0.36	J	0.61	0.36	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Silver	2.2		0.30	0.079	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Sodium	220		61	9.0	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Thallium	0.71		0.61	0.30	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Vanadium	19		0.30	0.072	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1
Zinc	56		1.2	0.53	mg/Kg	☼	12/06/19 17:27	12/11/19 04:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:47	1
Boron	0.095	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:47	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:47	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:47	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:47	1
Manganese	1.9		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:47	1
Nickel	0.031		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:47	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:47	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:47	1
Zinc	0.16	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:47	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.11		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 19:56	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.019	0.0065	mg/Kg	☼	12/10/19 13:20	12/11/19 07:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.2	0.2	SU			12/04/19 13:33	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Date Collected: 12/02/19 11:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00080	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,1-Dichloroethane	<0.0024		0.0024	0.00081	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,1-Dichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,2-Dichloroethane	<0.0059		0.0059	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,2-Dichloropropane	<0.0024		0.0024	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00083	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
2-Butanone (MEK)	<0.0059		0.0059	0.0026	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
2-Hexanone	<0.0059		0.0059	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
4-Methyl-2-pentanone (MIBK)	<0.0059		0.0059	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Acetone	0.068		0.024	0.010	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Benzene	0.0012	J	0.0024	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Bromodichloromethane	<0.0024		0.0024	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Bromoform	<0.0024		0.0024	0.00069	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Bromomethane	<0.0059	*	0.0059	0.0022	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Carbon disulfide	<0.0059		0.0059	0.0012	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Carbon tetrachloride	<0.0024		0.0024	0.00069	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Chlorobenzene	<0.0024		0.0024	0.00087	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Chloroethane	<0.0059	*	0.0059	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Chloroform	<0.0024		0.0024	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Chloromethane	<0.0059		0.0059	0.0024	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00066	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00071	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Dibromochloromethane	<0.0024		0.0024	0.00078	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00070	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Methylene Chloride	<0.0059		0.0059	0.0023	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Styrene	<0.0024		0.0024	0.00072	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Tetrachloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Toluene	0.00076	J	0.0024	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00083	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Trichloroethene	0.0053		0.0024	0.00080	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Vinyl acetate	<0.0059		0.0059	0.0021	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Vinyl chloride	<0.0024		0.0024	0.0010	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1
Xylenes, Total	0.0014	J	0.0047	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 04:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	12/02/19 18:00	12/10/19 04:31	1
4-Bromofluorobenzene (Surr)	107		75 - 131	12/02/19 18:00	12/10/19 04:31	1
Dibromofluoromethane	88		75 - 126	12/02/19 18:00	12/10/19 04:31	1
Toluene-d8 (Surr)	89		75 - 124	12/02/19 18:00	12/10/19 04:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.91		0.91	0.40	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Bis(2-chloroethyl)ether	<0.91	*	0.91	0.27	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
1,3-Dichlorobenzene	<0.91		0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
1,4-Dichlorobenzene	<0.91		0.91	0.23	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Date Collected: 12/02/19 11:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.91		0.91	0.22	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2-Methylphenol	<0.91		0.91	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,2'-oxybis[1-chloropropane]	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
N-Nitrosodi-n-propylamine	<0.37		0.37	0.22	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Hexachloroethane	<0.91		0.91	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2-Chlorophenol	<0.91	*	0.91	0.31	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Nitrobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Bis(2-chloroethoxy)methane	<0.91		0.91	0.19	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
1,2,4-Trichlorobenzene	<0.91		0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Isophorone	0.77	J	0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,4-Dimethylphenol	<1.8	*	1.8	0.69	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Hexachlorobutadiene	<0.91		0.91	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Naphthalene	<0.18		0.18	0.028	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,4-Dichlorophenol	<1.8		1.8	0.43	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4-Chloroaniline	<3.7		3.7	0.85	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,4,6-Trichlorophenol	<1.8		1.8	0.62	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,4,5-Trichlorophenol	<1.8		1.8	0.41	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Hexachlorocyclopentadiene	<3.7	*	3.7	1.0	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2-Methylnaphthalene	0.062	J	0.37	0.033	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2-Nitroaniline	<0.91		0.91	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2-Chloronaphthalene	<0.91		0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4-Chloro-3-methylphenol	<1.8		1.8	0.62	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,6-Dinitrotoluene	<0.91		0.91	0.36	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2-Nitrophenol	<1.8		1.8	0.43	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
3-Nitroaniline	<1.8		1.8	0.56	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Dimethyl phthalate	<0.91		0.91	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,4-Dinitrophenol	<3.7		3.7	3.2	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Acenaphthylene	0.049	J	0.18	0.024	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
2,4-Dinitrotoluene	<0.91		0.91	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Acenaphthene	0.29		0.18	0.033	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Dibenzofuran	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4-Nitrophenol	<3.7		3.7	1.7	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Fluorene	0.18		0.18	0.026	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4-Nitroaniline	<1.8		1.8	0.76	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4-Bromophenyl phenyl ether	<0.91		0.91	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Hexachlorobenzene	<0.37		0.37	0.042	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Diethyl phthalate	<0.91		0.91	0.31	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4-Chlorophenyl phenyl ether	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Pentachlorophenol	<3.7		3.7	2.9	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
N-Nitrosodiphenylamine	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
4,6-Dinitro-2-methylphenol	<3.7		3.7	1.5	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Phenanthrene	1.5		0.18	0.025	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Anthracene	0.40		0.18	0.030	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Carbazole	<0.91		0.91	0.45	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Di-n-butyl phthalate	<0.91		0.91	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Fluoranthene	2.0		0.18	0.034	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Pyrene	1.8		0.18	0.036	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Butyl benzyl phthalate	<0.91		0.91	0.35	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Benzo[a]anthracene	0.76		0.18	0.024	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Date Collected: 12/02/19 11:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.92		0.18	0.050	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
3,3'-Dichlorobenzidine	<0.91		0.91	0.25	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Bis(2-ethylhexyl) phthalate	<0.91		0.91	0.33	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Di-n-octyl phthalate	<0.91		0.91	0.30	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Benzo[b]fluoranthene	1.0		0.18	0.039	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Benzo[k]fluoranthene	0.61		0.18	0.054	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Benzo[a]pyrene	0.76		0.18	0.035	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Indeno[1,2,3-cd]pyrene	0.25		0.18	0.047	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Dibenz(a,h)anthracene	<0.18		0.18	0.035	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
Benzo[g,h,i]perylene	0.19		0.18	0.058	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5
3 & 4 Methylphenol	<0.91		0.91	0.30	mg/Kg	☼	12/11/19 07:45	12/13/19 18:57	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	9	X	31 - 166	12/11/19 07:45	12/13/19 18:57	5
Phenol-d5	10	X	30 - 153	12/11/19 07:45	12/13/19 18:57	5
Nitrobenzene-d5	55		37 - 147	12/11/19 07:45	12/13/19 18:57	5
2-Fluorobiphenyl	74		43 - 145	12/11/19 07:45	12/13/19 18:57	5
2,4,6-Tribromophenol	0	X	31 - 143	12/11/19 07:45	12/13/19 18:57	5
Terphenyl-d14	75		42 - 157	12/11/19 07:45	12/13/19 18:57	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.1	0.21	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Arsenic	2.4		0.54	0.18	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Barium	48		0.54	0.061	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Beryllium	0.44		0.22	0.050	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Boron	16		2.7	0.25	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Cadmium	0.23	B	0.11	0.019	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Calcium	180000	B	110	18	mg/Kg	☼	12/06/19 17:27	12/11/19 12:34	10
Chromium	9.4		0.54	0.27	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Cobalt	2.6		0.54	0.14	mg/Kg	☼	12/06/19 17:27	12/12/19 01:27	2
Copper	14	B	0.54	0.15	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Iron	5500	B	11	5.6	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Lead	18		0.54	0.25	mg/Kg	☼	12/06/19 17:27	12/12/19 01:27	2
Magnesium	64000		11	5.3	mg/Kg	☼	12/06/19 17:27	12/12/19 01:27	2
Manganese	300	B	0.54	0.078	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Nickel	9.7		1.1	0.31	mg/Kg	☼	12/06/19 17:27	12/12/19 01:27	2
Potassium	950		27	9.5	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Selenium	0.38	J	0.54	0.32	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Silver	0.90		0.27	0.069	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Sodium	420		54	8.0	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Thallium	<1.1		1.1	0.54	mg/Kg	☼	12/06/19 17:27	12/12/19 01:27	2
Vanadium	12		0.27	0.063	mg/Kg	☼	12/06/19 17:27	12/11/19 04:42	1
Zinc	42		2.2	0.94	mg/Kg	☼	12/06/19 17:27	12/12/19 01:27	2

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.29	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:51	1
Boron	0.17	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Date Collected: 12/02/19 11:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:51	1
Chromium	0.011	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:51	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:51	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:51	1
Manganese	0.13		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:51	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:51	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:51	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:51	1
Zinc	<0.50	*	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:10	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.017	0.0056	mg/Kg	☼	12/10/19 13:20	12/11/19 07:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	11.1		0.2	0.2	SU			12/04/19 13:40	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0026		0.0026	0.00086	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,1,2,2-Tetrachloroethane	<0.0026		0.0026	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,1,2-Trichloroethane	<0.0026		0.0026	0.0011	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,1-Dichloroethane	<0.0026		0.0026	0.00087	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,1-Dichloroethene	<0.0026		0.0026	0.00088	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,2-Dichloroethane	<0.0064		0.0064	0.0020	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,2-Dichloropropane	<0.0026		0.0026	0.00066	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
1,3-Dichloropropene, Total	<0.0026		0.0026	0.00090	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
2-Butanone (MEK)	0.021		0.0064	0.0028	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
2-Hexanone	<0.0064		0.0064	0.0020	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
4-Methyl-2-pentanone (MIBK)	<0.0064		0.0064	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Acetone	0.17		0.026	0.011	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Benzene	0.0018	J	0.0026	0.00065	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Bromodichloromethane	<0.0026		0.0026	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Bromoform	<0.0026		0.0026	0.00074	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Bromomethane	<0.0064		0.0064	0.0024	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Carbon disulfide	<0.0064		0.0064	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Carbon tetrachloride	<0.0026		0.0026	0.00074	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Chlorobenzene	<0.0026		0.0026	0.00094	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Chloroethane	<0.0064		0.0064	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Chloroform	<0.0026		0.0026	0.00089	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Chloromethane	<0.0064		0.0064	0.0026	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
cis-1,2-Dichloroethene	0.0027		0.0026	0.00071	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
cis-1,3-Dichloropropene	<0.0026		0.0026	0.00077	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Dibromochloromethane	<0.0026		0.0026	0.00083	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Ethylbenzene	<0.0026		0.0026	0.0012	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Methyl tert-butyl ether	<0.0026		0.0026	0.00075	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Methylene Chloride	<0.0064		0.0064	0.0025	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Styrene	<0.0026		0.0026	0.00077	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Tetrachloroethene	<0.0026		0.0026	0.00087	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Toluene	0.0018	J	0.0026	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
trans-1,2-Dichloroethene	<0.0026		0.0026	0.0011	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
trans-1,3-Dichloropropene	<0.0026		0.0026	0.00090	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Trichloroethene	0.0023	J	0.0026	0.00086	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Vinyl acetate	<0.0064		0.0064	0.0022	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Vinyl chloride	<0.0026		0.0026	0.0011	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1
Xylenes, Total	0.0033	J	0.0051	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 12:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	12/02/19 18:00	12/10/19 12:09	1
4-Bromofluorobenzene (Surr)	105		75 - 131	12/02/19 18:00	12/10/19 12:09	1
Dibromofluoromethane	67	X	75 - 126	12/02/19 18:00	12/10/19 12:09	1
Toluene-d8 (Surr)	97		75 - 124	12/02/19 18:00	12/10/19 12:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.91		0.91	0.40	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Bis(2-chloroethyl)ether	<0.91	*	0.91	0.27	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
1,3-Dichlorobenzene	<0.91		0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
1,4-Dichlorobenzene	<0.91		0.91	0.23	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.91		0.91	0.22	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2-Methylphenol	<0.91		0.91	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,2'-oxybis[1-chloropropane]	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
N-Nitrosodi-n-propylamine	<0.37		0.37	0.22	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Hexachloroethane	<0.91		0.91	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2-Chlorophenol	<0.91	*	0.91	0.31	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Nitrobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Bis(2-chloroethoxy)methane	<0.91		0.91	0.18	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
1,2,4-Trichlorobenzene	<0.91		0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Isophorone	0.80	J	0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,4-Dimethylphenol	<1.8	*	1.8	0.69	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Hexachlorobutadiene	<0.91		0.91	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Naphthalene	0.17	J	0.18	0.028	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,4-Dichlorophenol	<1.8		1.8	0.43	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4-Chloroaniline	<3.7		3.7	0.85	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,4,6-Trichlorophenol	<1.8		1.8	0.62	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,4,5-Trichlorophenol	<1.8		1.8	0.41	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Hexachlorocyclopentadiene	<3.7	*	3.7	1.0	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2-Methylnaphthalene	0.13	J	0.37	0.033	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2-Nitroaniline	<0.91		0.91	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2-Chloronaphthalene	<0.91		0.91	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4-Chloro-3-methylphenol	<1.8		1.8	0.62	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,6-Dinitrotoluene	<0.91		0.91	0.36	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2-Nitrophenol	<1.8		1.8	0.43	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
3-Nitroaniline	<1.8		1.8	0.56	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Dimethyl phthalate	<0.91		0.91	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,4-Dinitrophenol	<3.7		3.7	3.2	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Acenaphthylene	0.042	J	0.18	0.024	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
2,4-Dinitrotoluene	<0.91		0.91	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Acenaphthene	0.31		0.18	0.033	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Dibenzofuran	0.24	J	0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4-Nitrophenol	<3.7		3.7	1.7	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Fluorene	0.36		0.18	0.025	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4-Nitroaniline	<1.8		1.8	0.76	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4-Bromophenyl phenyl ether	<0.91		0.91	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Hexachlorobenzene	<0.37		0.37	0.042	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Diethyl phthalate	<0.91		0.91	0.31	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4-Chlorophenyl phenyl ether	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Pentachlorophenol	<3.7		3.7	2.9	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
N-Nitrosodiphenylamine	<0.91		0.91	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
4,6-Dinitro-2-methylphenol	<3.7		3.7	1.5	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Phenanthrene	2.0		0.18	0.025	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Anthracene	0.56		0.18	0.030	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Carbazole	<0.91		0.91	0.45	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Di-n-butyl phthalate	<0.91		0.91	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Fluoranthene	2.1		0.18	0.034	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Pyrene	1.9		0.18	0.036	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Butyl benzyl phthalate	<0.91		0.91	0.34	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Benzo[a]anthracene	0.87		0.18	0.024	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	1.0		0.18	0.049	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
3,3'-Dichlorobenzidine	<0.91		0.91	0.25	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Bis(2-ethylhexyl) phthalate	<0.91		0.91	0.33	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Di-n-octyl phthalate	<0.91		0.91	0.30	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Benzo[b]fluoranthene	1.3		0.18	0.039	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Benzo[k]fluoranthene	0.57		0.18	0.053	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Benzo[a]pyrene	0.77		0.18	0.035	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Indeno[1,2,3-cd]pyrene	0.28		0.18	0.047	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Dibenz(a,h)anthracene	<0.18		0.18	0.035	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Benzo[g,h,i]perylene	0.21		0.18	0.058	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
3 & 4 Methylphenol	<0.91		0.91	0.30	mg/Kg	☼	12/11/19 07:45	12/13/19 19:21	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	0	X	31 - 166				12/11/19 07:45	12/13/19 19:21	5
Phenol-d5	38		30 - 153				12/11/19 07:45	12/13/19 19:21	5
Nitrobenzene-d5	65		37 - 147				12/11/19 07:45	12/13/19 19:21	5
2-Fluorobiphenyl	95		43 - 145				12/11/19 07:45	12/13/19 19:21	5
2,4,6-Tribromophenol	0	X	31 - 143				12/11/19 07:45	12/13/19 19:21	5
Terphenyl-d14	97		42 - 157				12/11/19 07:45	12/13/19 19:21	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J	1.0	0.20	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Arsenic	2.7		0.51	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Barium	79		0.51	0.058	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Beryllium	0.39		0.20	0.048	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Boron	16		2.6	0.24	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Cadmium	0.22	B	0.10	0.018	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Calcium	160000	B	100	17	mg/Kg	☼	12/06/19 17:27	12/11/19 12:39	10
Chromium	8.8		0.51	0.25	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Cobalt	2.8		0.51	0.13	mg/Kg	☼	12/06/19 17:27	12/12/19 01:31	2
Copper	12	B	0.51	0.14	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Iron	5400	B	10	5.3	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Lead	16		0.51	0.24	mg/Kg	☼	12/06/19 17:27	12/12/19 01:31	2
Magnesium	58000		10	5.1	mg/Kg	☼	12/06/19 17:27	12/12/19 01:31	2
Manganese	270	B	0.51	0.074	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Nickel	8.9		1.0	0.30	mg/Kg	☼	12/06/19 17:27	12/12/19 01:31	2
Potassium	970		26	9.0	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Selenium	0.36	J	0.51	0.30	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Silver	0.74		0.26	0.066	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Sodium	490		51	7.6	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Thallium	<1.0		1.0	0.51	mg/Kg	☼	12/06/19 17:27	12/12/19 01:31	2
Vanadium	11		0.26	0.060	mg/Kg	☼	12/06/19 17:27	12/11/19 04:46	1
Zinc	39		2.0	0.90	mg/Kg	☼	12/06/19 17:27	12/12/19 01:31	2

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.27	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:55	1
Boron	0.13	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:55	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:55	1
Chromium	0.016	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:55	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:55	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:55	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:55	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:55	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:55	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:55	1
Zinc	0.13	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:55	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:14	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:14	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.017	0.0058	mg/Kg	☼	12/10/19 13:20	12/11/19 07:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	11.5		0.2	0.2	SU			12/04/19 13:48	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Date Collected: 12/02/19 11:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 90.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,2-Dichloroethane	<0.0046		0.0046	0.0015	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
2-Hexanone	<0.0046		0.0046	0.0015	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Acetone	0.041		0.019	0.0081	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Bromomethane	<0.0046 *		0.0046	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Trichloroethene	0.0020		0.0019	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 05:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 134	12/02/19 18:00	12/10/19 05:21	1
4-Bromofluorobenzene (Surr)	107		75 - 131	12/02/19 18:00	12/10/19 05:21	1
Dibromofluoromethane	83		75 - 126	12/02/19 18:00	12/10/19 05:21	1
Toluene-d8 (Surr)	91		75 - 124	12/02/19 18:00	12/10/19 05:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.90		0.90	0.40	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Bis(2-chloroethyl)ether	<0.90 *		0.90	0.27	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
1,3-Dichlorobenzene	<0.90		0.90	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
1,4-Dichlorobenzene	<0.90		0.90	0.23	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Date Collected: 12/02/19 11:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 90.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.90		0.90	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2-Methylphenol	<0.90		0.90	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,2'-oxybis[1-chloropropane]	<0.90		0.90	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
N-Nitrosodi-n-propylamine	<0.36		0.36	0.22	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Hexachloroethane	<0.90		0.90	0.27	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2-Chlorophenol	<0.90	*	0.90	0.31	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Nitrobenzene	<0.18		0.18	0.045	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Bis(2-chloroethoxy)methane	<0.90		0.90	0.18	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
1,2,4-Trichlorobenzene	<0.90		0.90	0.19	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Isophorone	<0.90		0.90	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,4-Dimethylphenol	<1.8	*	1.8	0.68	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Hexachlorobutadiene	<0.90		0.90	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Naphthalene	0.17	J	0.18	0.028	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,4-Dichlorophenol	<1.8		1.8	0.42	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4-Chloroaniline	<3.6		3.6	0.84	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,4,6-Trichlorophenol	<1.8		1.8	0.61	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,4,5-Trichlorophenol	<1.8		1.8	0.41	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Hexachlorocyclopentadiene	<3.6	*	3.6	1.0	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2-Methylnaphthalene	0.15	J	0.36	0.033	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2-Nitroaniline	<0.90		0.90	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2-Chloronaphthalene	<0.90		0.90	0.20	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4-Chloro-3-methylphenol	<1.8		1.8	0.61	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,6-Dinitrotoluene	<0.90		0.90	0.35	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2-Nitrophenol	<1.8		1.8	0.42	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
3-Nitroaniline	<1.8		1.8	0.55	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Dimethyl phthalate	<0.90		0.90	0.23	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,4-Dinitrophenol	<3.6		3.6	3.2	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Acenaphthylene	0.043	J	0.18	0.024	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
2,4-Dinitrotoluene	<0.90		0.90	0.28	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Acenaphthene	0.25		0.18	0.032	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Dibenzofuran	0.22	J	0.90	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4-Nitrophenol	<3.6		3.6	1.7	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Fluorene	0.29		0.18	0.025	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4-Nitroaniline	<1.8		1.8	0.75	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4-Bromophenyl phenyl ether	<0.90		0.90	0.24	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Hexachlorobenzene	<0.36		0.36	0.041	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Diethyl phthalate	<0.90		0.90	0.30	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4-Chlorophenyl phenyl ether	<0.90		0.90	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Pentachlorophenol	<3.6		3.6	2.9	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
N-Nitrosodiphenylamine	<0.90		0.90	0.21	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
4,6-Dinitro-2-methylphenol	<3.6		3.6	1.4	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Phenanthrene	1.8		0.18	0.025	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Anthracene	0.50		0.18	0.030	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Carbazole	<0.90		0.90	0.45	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Di-n-butyl phthalate	<0.90		0.90	0.27	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Fluoranthene	1.9		0.18	0.033	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Pyrene	1.7		0.18	0.036	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Butyl benzyl phthalate	<0.90		0.90	0.34	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Benzo[a]anthracene	0.76		0.18	0.024	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Date Collected: 12/02/19 11:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 90.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.88		0.18	0.049	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
3,3'-Dichlorobenzidine	<0.90		0.90	0.25	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Bis(2-ethylhexyl) phthalate	<0.90		0.90	0.33	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Di-n-octyl phthalate	<0.90		0.90	0.29	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Benzo[b]fluoranthene	0.65		0.18	0.039	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Benzo[k]fluoranthene	0.79		0.18	0.053	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Benzo[a]pyrene	0.73		0.18	0.035	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Indeno[1,2,3-cd]pyrene	0.25		0.18	0.046	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Dibenz(a,h)anthracene	<0.18		0.18	0.035	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
Benzo[g,h,i]perylene	0.14 J		0.18	0.058	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5
3 & 4 Methylphenol	<0.90		0.90	0.30	mg/Kg	☼	12/11/19 07:45	12/13/19 19:45	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	0	X	31 - 166	12/11/19 07:45	12/13/19 19:45	5
Phenol-d5	45		30 - 153	12/11/19 07:45	12/13/19 19:45	5
Nitrobenzene-d5	66		37 - 147	12/11/19 07:45	12/13/19 19:45	5
2-Fluorobiphenyl	99		43 - 145	12/11/19 07:45	12/13/19 19:45	5
2,4,6-Tribromophenol	30	X	31 - 143	12/11/19 07:45	12/13/19 19:45	5
Terphenyl-d14	105		42 - 157	12/11/19 07:45	12/13/19 19:45	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74 J		1.1	0.21	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Arsenic	2.4		0.53	0.18	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Barium	69		0.53	0.060	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Beryllium	0.36		0.21	0.050	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Boron	16		2.7	0.25	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Cadmium	0.20 B		0.11	0.019	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Calcium	180000 B		110	18	mg/Kg	☼	12/06/19 17:27	12/11/19 12:43	10
Chromium	11		0.53	0.26	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Cobalt	2.7		0.53	0.14	mg/Kg	☼	12/06/19 17:27	12/12/19 01:35	2
Copper	14 B		0.53	0.15	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Iron	5700 B		11	5.5	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Lead	20		0.53	0.25	mg/Kg	☼	12/06/19 17:27	12/12/19 01:35	2
Magnesium	63000		11	5.3	mg/Kg	☼	12/06/19 17:27	12/12/19 01:35	2
Manganese	330 B		0.53	0.077	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Nickel	9.4		1.1	0.31	mg/Kg	☼	12/06/19 17:27	12/12/19 01:35	2
Potassium	900		27	9.4	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Selenium	0.54		0.53	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Silver	0.73		0.27	0.068	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Sodium	490		53	7.9	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Thallium	<1.1		1.1	0.53	mg/Kg	☼	12/06/19 17:27	12/12/19 01:35	2
Vanadium	12		0.27	0.063	mg/Kg	☼	12/06/19 17:27	12/11/19 04:50	1
Zinc	43		2.1	0.93	mg/Kg	☼	12/06/19 17:27	12/12/19 01:35	2

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.30 J		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 03:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 03:00	1
Boron	0.098 J		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 03:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Date Collected: 12/02/19 11:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 90.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 03:00	1
Chromium	0.020	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:00	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:00	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 03:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 03:00	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:00	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:00	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 03:00	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:00	1
Zinc	0.046	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 03:00	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:17	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:17	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.016	0.0055	mg/Kg	☼	12/10/19 13:20	12/11/19 07:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	11.6		0.2	0.2	SU			12/04/19 13:55	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Acetone	0.012	J	0.017	0.0075	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 05:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	12/02/19 18:00	12/10/19 05:47	1
4-Bromofluorobenzene (Surr)	103		75 - 131	12/02/19 18:00	12/10/19 05:47	1
Dibromofluoromethane	107		75 - 126	12/02/19 18:00	12/10/19 05:47	1
Toluene-d8 (Surr)	90		75 - 124	12/02/19 18:00	12/10/19 05:47	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Bis(2-chloroethyl)ether	<0.21	*	0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,4-Dimethylphenol	<0.41	*	0.41	0.16	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2-Methylnaphthalene	0.027	J	0.083	0.0076	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Phenanthrene	0.050		0.041	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/11/19 07:45	12/12/19 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		31 - 166	12/11/19 07:45	12/12/19 16:04	1
Phenol-d5	85		30 - 153	12/11/19 07:45	12/12/19 16:04	1
Nitrobenzene-d5	110		37 - 147	12/11/19 07:45	12/12/19 16:04	1
2-Fluorobiphenyl	95		43 - 145	12/11/19 07:45	12/12/19 16:04	1
2,4,6-Tribromophenol	69		31 - 143	12/11/19 07:45	12/12/19 16:04	1
Terphenyl-d14	117		42 - 157	12/11/19 07:45	12/12/19 16:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.1	0.22	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Arsenic	7.0		0.57	0.20	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Barium	45		0.57	0.065	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Beryllium	0.67		0.23	0.053	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Boron	17		2.9	0.27	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Cadmium	0.14	B	0.11	0.021	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Calcium	63000	B	110	19	mg/Kg	☼	12/06/19 17:27	12/11/19 12:47	10
Chromium	16		0.57	0.28	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Cobalt	13		0.29	0.075	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Copper	30	B	0.57	0.16	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Iron	20000	B	11	5.9	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Lead	14		0.29	0.13	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Magnesium	23000		5.7	2.8	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Manganese	350	B	0.57	0.083	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Nickel	35		0.57	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Potassium	3400		29	10	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Selenium	0.85		0.57	0.34	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Silver	2.0		0.29	0.074	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Sodium	280		57	8.5	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Thallium	0.66		0.57	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Vanadium	18		0.29	0.067	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1
Zinc	53		1.1	0.50	mg/Kg	☼	12/06/19 17:27	12/11/19 04:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 03:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 03:04	1
Boron	0.083	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 03:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 03:04	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:04	1
Cobalt	0.011	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:04	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 03:04	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 03:04	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:04	1
Nickel	0.035		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:04	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 03:04	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:04	1
Zinc	0.14	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 03:04	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.061		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 20:12	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.020	0.0067	mg/Kg	☼	12/10/19 13:20	12/11/19 07:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/04/19 14:10	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Date Collected: 12/02/19 11:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Acetone	0.029		0.017	0.0075	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/02/19 18:00	12/10/19 06:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	12/02/19 18:00	12/10/19 06:12	1
4-Bromofluorobenzene (Surr)	104		75 - 131	12/02/19 18:00	12/10/19 06:12	1
Dibromofluoromethane	106		75 - 126	12/02/19 18:00	12/10/19 06:12	1
Toluene-d8 (Surr)	88		75 - 124	12/02/19 18:00	12/10/19 06:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Bis(2-chloroethyl)ether	<0.21	*	0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Date Collected: 12/02/19 11:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2-Chlorophenol	<0.21	*	0.21	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,4-Dimethylphenol	<0.41	*	0.41	0.16	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2-Methylnaphthalene	0.031	J	0.083	0.0076	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Phenanthrene	0.075		0.041	0.0057	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Date Collected: 12/02/19 11:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.017	J	0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/11/19 07:45	12/12/19 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	79		31 - 166				12/11/19 07:45	12/12/19 16:27	1
Phenol-d5	87		30 - 153				12/11/19 07:45	12/12/19 16:27	1
Nitrobenzene-d5	105		37 - 147				12/11/19 07:45	12/12/19 16:27	1
2-Fluorobiphenyl	94		43 - 145				12/11/19 07:45	12/12/19 16:27	1
2,4,6-Tribromophenol	69		31 - 143				12/11/19 07:45	12/12/19 16:27	1
Terphenyl-d14	120		42 - 157				12/11/19 07:45	12/12/19 16:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.2	0.24	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Arsenic	9.3		0.62	0.21	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Barium	46		0.62	0.071	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Beryllium	0.68		0.25	0.058	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Boron	17		3.1	0.29	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Cadmium	0.14	B	0.12	0.022	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Calcium	55000	B	120	21	mg/Kg	☼	12/06/19 17:27	12/11/19 12:51	10
Chromium	16		0.62	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Cobalt	17		0.31	0.082	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Copper	34	B	0.62	0.17	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Iron	22000	B	12	6.5	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Lead	16		0.31	0.14	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Magnesium	23000		6.2	3.1	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Manganese	330	B	0.62	0.091	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Nickel	40		0.62	0.18	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Potassium	3400		31	11	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Selenium	0.41	J	0.62	0.37	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Silver	2.1		0.31	0.081	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Sodium	220		62	9.2	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Thallium	1.1		0.62	0.31	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Vanadium	19		0.31	0.074	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1
Zinc	60		1.2	0.55	mg/Kg	☼	12/06/19 17:27	12/11/19 04:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 03:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 03:09	1
Boron	0.10	J	0.50	0.050	mg/L		12/06/19 15:40	12/10/19 03:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Date Collected: 12/02/19 11:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 03:09	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:09	1
Cobalt	0.011	J	0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:09	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 03:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 03:09	1
Manganese	1.9		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:09	1
Nickel	0.030		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:09	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 03:09	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 03:09	1
Zinc	0.10	J B *	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 03:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.088		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 20:16	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 19:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 19:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 09:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0065	mg/Kg	☼	12/10/19 13:20	12/11/19 07:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/04/19 14:17	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

GC/MS VOA

Prep Batch: 519329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	5035	
500-174357-11 - DL	2615V2-AI-B17 (0-6)	Total/NA	Solid	5035	
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	5035	
500-174357-16 - DL	2615V2-AI-B14 (0-6)	Total/NA	Solid	5035	

Prep Batch: 519360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	5035	
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	5035	
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	5035	
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	5035	
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	5035	
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	5035	
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	5035	
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	5035	
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	5035	
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	5035	
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	5035	
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	5035	
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	5035	
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	5035	
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	5035	
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	5035	
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	5035	
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	5035	

Leach Batch: 519571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	1311	
500-174357-16 - DL	2615V2-AI-B14 (0-6)	TCLP	Solid	1311	
LB 500-519571/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 519634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	8260B	519360
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	8260B	519360
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	8260B	519360
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	8260B	519360
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	8260B	519360
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	8260B	519360
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	8260B	519360
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	8260B	519360
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	8260B	519360
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	8260B	519360
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	8260B	519360
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	8260B	519360
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	8260B	519360
MB 500-519634/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-519634/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-519634/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

GC/MS VOA

Analysis Batch: 519702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	8260B	519360
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	8260B	519360
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	8260B	519360
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	8260B	519360
MB 500-519702/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-519702/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-519702/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 519841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	8260B	519571
LB 500-519571/1-A	Method Blank	TCLP	Solid	8260B	519571
MB 500-519841/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519841/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 519909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16 - DL	2615V2-AI-B14 (0-6)	TCLP	Solid	8260B	519571
MB 500-519909/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519909/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 519938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	8260B	519360
MB 500-519938/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519938/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 520186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	8260B	519329
500-174357-11 - DL	2615V2-AI-B17 (0-6)	Total/NA	Solid	8260B	519329
500-174357-16 - DL	2615V2-AI-B14 (0-6)	Total/NA	Solid	8260B	519329
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	8260B	519329
MB 500-520186/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-520186/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 518975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	1311	
LB 500-518975/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 519489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	3510C	518975
LB 500-518975/1-C	Method Blank	TCLP	Solid	3510C	518975
MB 500-519489/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-519489/2-A	Lab Control Sample	Total/NA	Solid	3510C	

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

GC/MS Semi VOA

Analysis Batch: 519544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	8270D	519489
LB 500-518975/1-C	Method Blank	TCLP	Solid	8270D	519489
MB 500-519489/1-A	Method Blank	Total/NA	Solid	8270D	519489
LCS 500-519489/2-A	Lab Control Sample	Total/NA	Solid	8270D	519489

Prep Batch: 519914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	3541	
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	3541	
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	3541	
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	3541	
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	3541	
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	3541	
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	3541	
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	3541	
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	3541	
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	3541	
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	3541	
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	3541	
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	3541	
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	3541	
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	3541	
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	3541	
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	3541	
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	3541	
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	3541	
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	3541	
MB 500-519914/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-519914/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-174357-1 MS	2615V2-AI-B18 (0-6)	Total/NA	Solid	3541	
500-174357-1 MSD	2615V2-AI-B18 (0-6)	Total/NA	Solid	3541	

Analysis Batch: 520171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-519914/1-A	Method Blank	Total/NA	Solid	8270D	519914
LCS 500-519914/2-A	Lab Control Sample	Total/NA	Solid	8270D	519914

Analysis Batch: 520210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	8270D	519914
500-174357-1 MS	2615V2-AI-B18 (0-6)	Total/NA	Solid	8270D	519914

Analysis Batch: 520219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	8270D	519914
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	8270D	519914
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	8270D	519914
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	8270D	519914
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	8270D	519914
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	8270D	519914
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	8270D	519914

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

GC/MS Semi VOA (Continued)

Analysis Batch: 520219 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	8270D	519914
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	8270D	519914
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	8270D	519914
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	8270D	519914
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	8270D	519914
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	8270D	519914
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	8270D	519914
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	8270D	519914
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	8270D	519914

Analysis Batch: 520461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	8270D	519914
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	8270D	519914
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	8270D	519914

Analysis Batch: 520719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1 MSD	2615V2-AI-B18 (0-6)	Total/NA	Solid	8270D	519914

GC Semi VOA

Leach Batch: 518975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	1311	
LB 500-518975/1-G	Method Blank	TCLP	Solid	1311	
LB 500-518975/1-H	Method Blank	TCLP	Solid	1311	
500-174357-16 MS	2615V2-AI-B14 (0-6)	TCLP	Solid	1311	

Prep Batch: 519560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	3510C	518975
LB 500-518975/1-G	Method Blank	TCLP	Solid	3510C	518975
MB 500-519560/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-519560/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCS 500-519560/3-A	Lab Control Sample	Total/NA	Solid	3510C	
500-174357-16 MS	2615V2-AI-B14 (0-6)	TCLP	Solid	3510C	518975
500-174357-16 MS	2615V2-AI-B14 (0-6)	TCLP	Solid	3510C	518975

Prep Batch: 519604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	3541	
MB 500-519604/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-519604/3-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 519607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	8081B	519560
LB 500-518975/1-G	Method Blank	TCLP	Solid	8081B	519560
MB 500-519560/1-A	Method Blank	Total/NA	Solid	8081B	519560
LCS 500-519560/2-A	Lab Control Sample	Total/NA	Solid	8081B	519560

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

GC Semi VOA (Continued)

Analysis Batch: 519607 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-519560/3-A	Lab Control Sample	Total/NA	Solid	8081B	519560
500-174357-16 MS	2615V2-AI-B14 (0-6)	TCLP	Solid	8081B	519560
500-174357-16 MS	2615V2-AI-B14 (0-6)	TCLP	Solid	8081B	519560

Analysis Batch: 519618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	8082A	519604
MB 500-519604/1-A	Method Blank	Total/NA	Solid	8082A	519604
LCS 500-519604/3-A	Lab Control Sample	Total/NA	Solid	8082A	519604

Prep Batch: 519789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	8151A	518975
LB 500-518975/1-H	Method Blank	TCLP	Solid	8151A	518975
MB 500-519789/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 500-519789/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 519870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	8151	519789
LB 500-518975/1-H	Method Blank	TCLP	Solid	8151	519789
MB 500-519789/1-A	Method Blank	Total/NA	Solid	8151	519789
LCS 500-519789/2-A	Lab Control Sample	Total/NA	Solid	8151	519789

Metals

Leach Batch: 518975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	TCLP	Solid	1311	
500-174357-2	2615V2-AI-B18 (6-12)	TCLP	Solid	1311	
500-174357-3	2615V2-AI-B18 (12-18)	TCLP	Solid	1311	
500-174357-4	2615V2-AI-B18 (18-24)	TCLP	Solid	1311	
500-174357-5	2615V2-AI-B18 (24-30)	TCLP	Solid	1311	
500-174357-6	2615V2-AI-B24 (0-6)	TCLP	Solid	1311	
500-174357-7	2615V2-AI-B24 (6-12)	TCLP	Solid	1311	
500-174357-8	2615V2-AI-B24 (12-18)	TCLP	Solid	1311	
500-174357-9	2615V2-AI-B24 (18-24)	TCLP	Solid	1311	
500-174357-10	2615V2-AI-B24 (24-30)	TCLP	Solid	1311	
500-174357-11	2615V2-AI-B17 (0-6)	TCLP	Solid	1311	
500-174357-12	2615V2-AI-B17 (6-12)	TCLP	Solid	1311	
500-174357-13	2615V2-AI-B17 (12-18)	TCLP	Solid	1311	
500-174357-14	2615V2-AI-B17 (18-24)	TCLP	Solid	1311	
500-174357-15	2615V2-AI-B17 (24-30)	TCLP	Solid	1311	
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	1311	
500-174357-17	2615V2-AI-B14 (6-12)	TCLP	Solid	1311	
500-174357-18	2615V2-AI-B14 (12-18)	TCLP	Solid	1311	
500-174357-19	2615V2-AI-B14 (18-24)	TCLP	Solid	1311	
500-174357-20	2615V2-AI-B14 (24-30)	TCLP	Solid	1311	
LB 500-518975/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518975/1-E	Method Blank	TCLP	Solid	1311	
500-174357-10 MS	2615V2-AI-B24 (24-30)	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Leach Batch: 518975 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-20 MS	2615V2-AI-B14 (24-30)	TCLP	Solid	1311	
500-174357-10 DU	2615V2-AI-B24 (24-30)	TCLP	Solid	1311	
500-174357-20 DU	2615V2-AI-B14 (24-30)	TCLP	Solid	1311	

Leach Batch: 519190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	SPLP East	Solid	1312	
500-174357-2	2615V2-AI-B18 (6-12)	SPLP East	Solid	1312	
500-174357-3	2615V2-AI-B18 (12-18)	SPLP East	Solid	1312	
500-174357-4	2615V2-AI-B18 (18-24)	SPLP East	Solid	1312	
500-174357-5	2615V2-AI-B18 (24-30)	SPLP East	Solid	1312	
500-174357-9	2615V2-AI-B24 (18-24)	SPLP East	Solid	1312	
500-174357-10	2615V2-AI-B24 (24-30)	SPLP East	Solid	1312	
500-174357-11	2615V2-AI-B17 (0-6)	SPLP East	Solid	1312	
500-174357-12	2615V2-AI-B17 (6-12)	SPLP East	Solid	1312	
500-174357-13	2615V2-AI-B17 (12-18)	SPLP East	Solid	1312	
500-174357-14	2615V2-AI-B17 (18-24)	SPLP East	Solid	1312	
500-174357-15	2615V2-AI-B17 (24-30)	SPLP East	Solid	1312	
500-174357-16	2615V2-AI-B14 (0-6)	SPLP East	Solid	1312	
500-174357-17	2615V2-AI-B14 (6-12)	SPLP East	Solid	1312	
500-174357-18	2615V2-AI-B14 (12-18)	SPLP East	Solid	1312	
500-174357-19	2615V2-AI-B14 (18-24)	SPLP East	Solid	1312	
500-174357-20	2615V2-AI-B14 (24-30)	SPLP East	Solid	1312	
LB 500-519190/1-B	Method Blank	SPLP East	Solid	1312	
500-174357-20 MS	2615V2-AI-B14 (24-30)	SPLP East	Solid	1312	
500-174357-20 DU	2615V2-AI-B14 (24-30)	SPLP East	Solid	1312	

Prep Batch: 519241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	TCLP	Solid	3010A	518975
500-174357-2	2615V2-AI-B18 (6-12)	TCLP	Solid	3010A	518975
500-174357-3	2615V2-AI-B18 (12-18)	TCLP	Solid	3010A	518975
500-174357-4	2615V2-AI-B18 (18-24)	TCLP	Solid	3010A	518975
500-174357-5	2615V2-AI-B18 (24-30)	TCLP	Solid	3010A	518975
500-174357-6	2615V2-AI-B24 (0-6)	TCLP	Solid	3010A	518975
500-174357-7	2615V2-AI-B24 (6-12)	TCLP	Solid	3010A	518975
500-174357-8	2615V2-AI-B24 (12-18)	TCLP	Solid	3010A	518975
500-174357-9	2615V2-AI-B24 (18-24)	TCLP	Solid	3010A	518975
500-174357-10	2615V2-AI-B24 (24-30)	TCLP	Solid	3010A	518975
500-174357-11	2615V2-AI-B17 (0-6)	TCLP	Solid	3010A	518975
500-174357-12	2615V2-AI-B17 (6-12)	TCLP	Solid	3010A	518975
500-174357-13	2615V2-AI-B17 (12-18)	TCLP	Solid	3010A	518975
500-174357-14	2615V2-AI-B17 (18-24)	TCLP	Solid	3010A	518975
500-174357-15	2615V2-AI-B17 (24-30)	TCLP	Solid	3010A	518975
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	3010A	518975
500-174357-17	2615V2-AI-B14 (6-12)	TCLP	Solid	3010A	518975
500-174357-18	2615V2-AI-B14 (12-18)	TCLP	Solid	3010A	518975
500-174357-19	2615V2-AI-B14 (18-24)	TCLP	Solid	3010A	518975
500-174357-20	2615V2-AI-B14 (24-30)	TCLP	Solid	3010A	518975
LB 500-518975/1-B	Method Blank	TCLP	Solid	3010A	518975
LCS 500-519241/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Prep Batch: 519241 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-20 MS	2615V2-AI-B14 (24-30)	TCLP	Solid	3010A	518975
500-174357-20 DU	2615V2-AI-B14 (24-30)	TCLP	Solid	3010A	518975

Prep Batch: 519275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	3050B	
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	3050B	
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	3050B	
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	3050B	
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	3050B	
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	3050B	
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	3050B	
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	3050B	
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	3050B	
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	3050B	
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	3050B	
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	3050B	
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	3050B	
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	3050B	
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	3050B	
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	3050B	
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	3050B	
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	3050B	
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	3050B	
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	3050B	
MB 500-519275/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-519275/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-174357-1 MS	2615V2-AI-B18 (0-6)	Total/NA	Solid	3050B	
500-174357-1 MSD	2615V2-AI-B18 (0-6)	Total/NA	Solid	3050B	
500-174357-1 DU	2615V2-AI-B18 (0-6)	Total/NA	Solid	3050B	

Prep Batch: 519341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	SPLP East	Solid	3010A	519190
500-174357-2	2615V2-AI-B18 (6-12)	SPLP East	Solid	3010A	519190
500-174357-3	2615V2-AI-B18 (12-18)	SPLP East	Solid	3010A	519190
500-174357-4	2615V2-AI-B18 (18-24)	SPLP East	Solid	3010A	519190
500-174357-5	2615V2-AI-B18 (24-30)	SPLP East	Solid	3010A	519190
500-174357-9	2615V2-AI-B24 (18-24)	SPLP East	Solid	3010A	519190
500-174357-10	2615V2-AI-B24 (24-30)	SPLP East	Solid	3010A	519190
500-174357-11	2615V2-AI-B17 (0-6)	SPLP East	Solid	3010A	519190
500-174357-12	2615V2-AI-B17 (6-12)	SPLP East	Solid	3010A	519190
500-174357-13	2615V2-AI-B17 (12-18)	SPLP East	Solid	3010A	519190
500-174357-14	2615V2-AI-B17 (18-24)	SPLP East	Solid	3010A	519190
500-174357-15	2615V2-AI-B17 (24-30)	SPLP East	Solid	3010A	519190
500-174357-16	2615V2-AI-B14 (0-6)	SPLP East	Solid	3010A	519190
500-174357-17	2615V2-AI-B14 (6-12)	SPLP East	Solid	3010A	519190
500-174357-18	2615V2-AI-B14 (12-18)	SPLP East	Solid	3010A	519190
500-174357-19	2615V2-AI-B14 (18-24)	SPLP East	Solid	3010A	519190
500-174357-20	2615V2-AI-B14 (24-30)	SPLP East	Solid	3010A	519190
LB 500-519190/1-B	Method Blank	SPLP East	Solid	3010A	519190

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Prep Batch: 519341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-519341/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174357-20 MS	2615V2-AI-B14 (24-30)	SPLP East	Solid	3010A	519190
500-174357-20 DU	2615V2-AI-B14 (24-30)	SPLP East	Solid	3010A	519190

Prep Batch: 519534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	TCLP	Solid	7470A	518975
500-174357-2	2615V2-AI-B18 (6-12)	TCLP	Solid	7470A	518975
500-174357-3	2615V2-AI-B18 (12-18)	TCLP	Solid	7470A	518975
500-174357-4	2615V2-AI-B18 (18-24)	TCLP	Solid	7470A	518975
500-174357-5	2615V2-AI-B18 (24-30)	TCLP	Solid	7470A	518975
500-174357-6	2615V2-AI-B24 (0-6)	TCLP	Solid	7470A	518975
500-174357-7	2615V2-AI-B24 (6-12)	TCLP	Solid	7470A	518975
500-174357-8	2615V2-AI-B24 (12-18)	TCLP	Solid	7470A	518975
500-174357-9	2615V2-AI-B24 (18-24)	TCLP	Solid	7470A	518975
500-174357-10	2615V2-AI-B24 (24-30)	TCLP	Solid	7470A	518975
500-174357-11	2615V2-AI-B17 (0-6)	TCLP	Solid	7470A	518975
500-174357-12	2615V2-AI-B17 (6-12)	TCLP	Solid	7470A	518975
500-174357-13	2615V2-AI-B17 (12-18)	TCLP	Solid	7470A	518975
500-174357-14	2615V2-AI-B17 (18-24)	TCLP	Solid	7470A	518975
500-174357-15	2615V2-AI-B17 (24-30)	TCLP	Solid	7470A	518975
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	7470A	518975
500-174357-17	2615V2-AI-B14 (6-12)	TCLP	Solid	7470A	518975
500-174357-18	2615V2-AI-B14 (12-18)	TCLP	Solid	7470A	518975
500-174357-19	2615V2-AI-B14 (18-24)	TCLP	Solid	7470A	518975
500-174357-20	2615V2-AI-B14 (24-30)	TCLP	Solid	7470A	518975
LB 500-518975/1-E	Method Blank	TCLP	Solid	7470A	518975
MB 500-519534/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-519534/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174357-10 MS	2615V2-AI-B24 (24-30)	TCLP	Solid	7470A	518975
500-174357-10 DU	2615V2-AI-B24 (24-30)	TCLP	Solid	7470A	518975

Analysis Batch: 519680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	TCLP	Solid	6010B	519241
500-174357-2	2615V2-AI-B18 (6-12)	TCLP	Solid	6010B	519241
500-174357-3	2615V2-AI-B18 (12-18)	TCLP	Solid	6010B	519241
500-174357-4	2615V2-AI-B18 (18-24)	TCLP	Solid	6010B	519241
500-174357-5	2615V2-AI-B18 (24-30)	TCLP	Solid	6010B	519241
500-174357-6	2615V2-AI-B24 (0-6)	TCLP	Solid	6010B	519241
500-174357-7	2615V2-AI-B24 (6-12)	TCLP	Solid	6010B	519241
500-174357-8	2615V2-AI-B24 (12-18)	TCLP	Solid	6010B	519241
500-174357-9	2615V2-AI-B24 (18-24)	TCLP	Solid	6010B	519241
500-174357-10	2615V2-AI-B24 (24-30)	TCLP	Solid	6010B	519241
500-174357-11	2615V2-AI-B17 (0-6)	TCLP	Solid	6010B	519241
500-174357-12	2615V2-AI-B17 (6-12)	TCLP	Solid	6010B	519241
500-174357-13	2615V2-AI-B17 (12-18)	TCLP	Solid	6010B	519241
500-174357-14	2615V2-AI-B17 (18-24)	TCLP	Solid	6010B	519241
500-174357-15	2615V2-AI-B17 (24-30)	TCLP	Solid	6010B	519241
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	6010B	519241
500-174357-17	2615V2-AI-B14 (6-12)	TCLP	Solid	6010B	519241

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Analysis Batch: 519680 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-18	2615V2-AI-B14 (12-18)	TCLP	Solid	6010B	519241
500-174357-19	2615V2-AI-B14 (18-24)	TCLP	Solid	6010B	519241
500-174357-20	2615V2-AI-B14 (24-30)	TCLP	Solid	6010B	519241
LB 500-518975/1-B	Method Blank	TCLP	Solid	6010B	519241
LCS 500-519241/2-A	Lab Control Sample	Total/NA	Solid	6010B	519241
500-174357-20 MS	2615V2-AI-B14 (24-30)	TCLP	Solid	6010B	519241
500-174357-20 DU	2615V2-AI-B14 (24-30)	TCLP	Solid	6010B	519241

Prep Batch: 519740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	7471B	
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	7471B	
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	7471B	
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	7471B	
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	7471B	
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	7471B	
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	7471B	
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	7471B	
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	7471B	
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	7471B	
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	7471B	
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	7471B	
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	7471B	
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	7471B	
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	7471B	
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	7471B	
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	7471B	
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	7471B	
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	7471B	
MB 500-519740/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-519740/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174357-10 MS	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	
500-174357-10 MSD	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	
500-174357-10 DU	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	

Analysis Batch: 519765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	TCLP	Solid	6020A	519241
500-174357-2	2615V2-AI-B18 (6-12)	TCLP	Solid	6020A	519241
500-174357-3	2615V2-AI-B18 (12-18)	TCLP	Solid	6020A	519241
500-174357-4	2615V2-AI-B18 (18-24)	TCLP	Solid	6020A	519241
500-174357-5	2615V2-AI-B18 (24-30)	TCLP	Solid	6020A	519241
500-174357-6	2615V2-AI-B24 (0-6)	TCLP	Solid	6020A	519241
500-174357-7	2615V2-AI-B24 (6-12)	TCLP	Solid	6020A	519241
500-174357-8	2615V2-AI-B24 (12-18)	TCLP	Solid	6020A	519241
500-174357-9	2615V2-AI-B24 (18-24)	TCLP	Solid	6020A	519241
500-174357-10	2615V2-AI-B24 (24-30)	TCLP	Solid	6020A	519241
500-174357-11	2615V2-AI-B17 (0-6)	TCLP	Solid	6020A	519241
500-174357-12	2615V2-AI-B17 (6-12)	TCLP	Solid	6020A	519241
500-174357-13	2615V2-AI-B17 (12-18)	TCLP	Solid	6020A	519241

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Analysis Batch: 519765 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-14	2615V2-AI-B17 (18-24)	TCLP	Solid	6020A	519241
500-174357-15	2615V2-AI-B17 (24-30)	TCLP	Solid	6020A	519241
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	6020A	519241
500-174357-17	2615V2-AI-B14 (6-12)	TCLP	Solid	6020A	519241
500-174357-18	2615V2-AI-B14 (12-18)	TCLP	Solid	6020A	519241
500-174357-19	2615V2-AI-B14 (18-24)	TCLP	Solid	6020A	519241
500-174357-20	2615V2-AI-B14 (24-30)	TCLP	Solid	6020A	519241
LB 500-518975/1-B	Method Blank	TCLP	Solid	6020A	519241
LCS 500-519241/2-A	Lab Control Sample	Total/NA	Solid	6020A	519241
500-174357-20 MS	2615V2-AI-B14 (24-30)	TCLP	Solid	6020A	519241
500-174357-20 DU	2615V2-AI-B14 (24-30)	TCLP	Solid	6020A	519241

Analysis Batch: 519778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	TCLP	Solid	7470A	519534
500-174357-2	2615V2-AI-B18 (6-12)	TCLP	Solid	7470A	519534
500-174357-3	2615V2-AI-B18 (12-18)	TCLP	Solid	7470A	519534
500-174357-4	2615V2-AI-B18 (18-24)	TCLP	Solid	7470A	519534
500-174357-5	2615V2-AI-B18 (24-30)	TCLP	Solid	7470A	519534
500-174357-6	2615V2-AI-B24 (0-6)	TCLP	Solid	7470A	519534
500-174357-7	2615V2-AI-B24 (6-12)	TCLP	Solid	7470A	519534
500-174357-8	2615V2-AI-B24 (12-18)	TCLP	Solid	7470A	519534
500-174357-9	2615V2-AI-B24 (18-24)	TCLP	Solid	7470A	519534
500-174357-10	2615V2-AI-B24 (24-30)	TCLP	Solid	7470A	519534
500-174357-11	2615V2-AI-B17 (0-6)	TCLP	Solid	7470A	519534
500-174357-12	2615V2-AI-B17 (6-12)	TCLP	Solid	7470A	519534
500-174357-13	2615V2-AI-B17 (12-18)	TCLP	Solid	7470A	519534
500-174357-14	2615V2-AI-B17 (18-24)	TCLP	Solid	7470A	519534
500-174357-15	2615V2-AI-B17 (24-30)	TCLP	Solid	7470A	519534
500-174357-16	2615V2-AI-B14 (0-6)	TCLP	Solid	7470A	519534
500-174357-17	2615V2-AI-B14 (6-12)	TCLP	Solid	7470A	519534
500-174357-18	2615V2-AI-B14 (12-18)	TCLP	Solid	7470A	519534
500-174357-19	2615V2-AI-B14 (18-24)	TCLP	Solid	7470A	519534
500-174357-20	2615V2-AI-B14 (24-30)	TCLP	Solid	7470A	519534
LB 500-518975/1-E	Method Blank	TCLP	Solid	7470A	519534
MB 500-519534/12-A	Method Blank	Total/NA	Solid	7470A	519534
LCS 500-519534/13-A	Lab Control Sample	Total/NA	Solid	7470A	519534
500-174357-10 MS	2615V2-AI-B24 (24-30)	TCLP	Solid	7470A	519534
500-174357-10 DU	2615V2-AI-B24 (24-30)	TCLP	Solid	7470A	519534

Analysis Batch: 519905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	SPLP East	Solid	6010B	519341
500-174357-2	2615V2-AI-B18 (6-12)	SPLP East	Solid	6010B	519341
500-174357-3	2615V2-AI-B18 (12-18)	SPLP East	Solid	6010B	519341
500-174357-4	2615V2-AI-B18 (18-24)	SPLP East	Solid	6010B	519341
500-174357-5	2615V2-AI-B18 (24-30)	SPLP East	Solid	6010B	519341
500-174357-9	2615V2-AI-B24 (18-24)	SPLP East	Solid	6010B	519341
500-174357-10	2615V2-AI-B24 (24-30)	SPLP East	Solid	6010B	519341
500-174357-11	2615V2-AI-B17 (0-6)	SPLP East	Solid	6010B	519341
500-174357-12	2615V2-AI-B17 (6-12)	SPLP East	Solid	6010B	519341

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Analysis Batch: 519905 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-13	2615V2-AI-B17 (12-18)	SPLP East	Solid	6010B	519341
500-174357-14	2615V2-AI-B17 (18-24)	SPLP East	Solid	6010B	519341
500-174357-15	2615V2-AI-B17 (24-30)	SPLP East	Solid	6010B	519341
500-174357-16	2615V2-AI-B14 (0-6)	SPLP East	Solid	6010B	519341
500-174357-17	2615V2-AI-B14 (6-12)	SPLP East	Solid	6010B	519341
500-174357-18	2615V2-AI-B14 (12-18)	SPLP East	Solid	6010B	519341
500-174357-19	2615V2-AI-B14 (18-24)	SPLP East	Solid	6010B	519341
500-174357-20	2615V2-AI-B14 (24-30)	SPLP East	Solid	6010B	519341
LB 500-519190/1-B	Method Blank	SPLP East	Solid	6010B	519341
LCS 500-519341/2-A	Lab Control Sample	Total/NA	Solid	6010B	519341
500-174357-20 MS	2615V2-AI-B14 (24-30)	SPLP East	Solid	6010B	519341
500-174357-20 DU	2615V2-AI-B14 (24-30)	SPLP East	Solid	6010B	519341

Analysis Batch: 519906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	6010B	519275
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	6010B	519275
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	6010B	519275
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	6010B	519275
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	6010B	519275
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	6010B	519275
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	6010B	519275
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	6010B	519275
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	6010B	519275
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	6010B	519275
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	6010B	519275
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	6010B	519275
MB 500-519275/1-A	Method Blank	Total/NA	Solid	6010B	519275
LCS 500-519275/2-A	Lab Control Sample	Total/NA	Solid	6010B	519275
500-174357-1 MS	2615V2-AI-B18 (0-6)	Total/NA	Solid	6010B	519275
500-174357-1 MSD	2615V2-AI-B18 (0-6)	Total/NA	Solid	6010B	519275
500-174357-1 DU	2615V2-AI-B18 (0-6)	Total/NA	Solid	6010B	519275

Analysis Batch: 520006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	7471B	519740
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	7471B	519740
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	7471B	519740
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	7471B	519740
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	7471B	519740
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	7471B	519740
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	7471B	519740
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	7471B	519740
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	7471B	519740
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	519740
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	7471B	519740
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	7471B	519740
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	7471B	519740
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	7471B	519740
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	7471B	519740
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	7471B	519740

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Metals (Continued)

Analysis Batch: 520006 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	7471B	519740
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	7471B	519740
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	7471B	519740
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	7471B	519740
MB 500-519740/12-A	Method Blank	Total/NA	Solid	7471B	519740
LCS 500-519740/13-A	Lab Control Sample	Total/NA	Solid	7471B	519740
500-174357-10 MS	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	519740
500-174357-10 MSD	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	519740
500-174357-10 DU	2615V2-AI-B24 (24-30)	Total/NA	Solid	7471B	519740

Analysis Batch: 520144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	6010B	519275
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	6010B	519275
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	6010B	519275
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	6010B	519275
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	6010B	519275
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	6010B	519275
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	6010B	519275
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	6010B	519275
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	6010B	519275
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	6010B	519275
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	6010B	519275

Analysis Batch: 520145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	6010B	519275
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	6010B	519275
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	6010B	519275
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	6010B	519275
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	6010B	519275
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	6010B	519275
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	6010B	519275
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	6010B	519275
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	6010B	519275
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	6010B	519275
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	6010B	519275
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	6010B	519275
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	6010B	519275
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	6010B	519275
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	6010B	519275
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	6010B	519275
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	6010B	519275

General Chemistry

Analysis Batch: 518584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	9045D	
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	9045D	
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	9045D	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

General Chemistry (Continued)

Analysis Batch: 518584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	9045D	
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	9045D	
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	9045D	
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	9045D	
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	9045D	
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	9045D	
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	9045D	
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	9045D	
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	9045D	
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	9045D	
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	9045D	
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	9045D	
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	9045D	
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	9045D	
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	9045D	
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	9045D	
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	9045D	
LCS 500-518584/5	Lab Control Sample	Total/NA	Solid	9045D	
LCS 500-518584/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-174357-12 DU	2615V2-AI-B17 (6-12)	Total/NA	Solid	9045D	

Analysis Batch: 518681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-1	2615V2-AI-B18 (0-6)	Total/NA	Solid	Moisture	
500-174357-2	2615V2-AI-B18 (6-12)	Total/NA	Solid	Moisture	
500-174357-3	2615V2-AI-B18 (12-18)	Total/NA	Solid	Moisture	
500-174357-4	2615V2-AI-B18 (18-24)	Total/NA	Solid	Moisture	
500-174357-5	2615V2-AI-B18 (24-30)	Total/NA	Solid	Moisture	
500-174357-6	2615V2-AI-B24 (0-6)	Total/NA	Solid	Moisture	
500-174357-7	2615V2-AI-B24 (6-12)	Total/NA	Solid	Moisture	
500-174357-8	2615V2-AI-B24 (12-18)	Total/NA	Solid	Moisture	
500-174357-9	2615V2-AI-B24 (18-24)	Total/NA	Solid	Moisture	
500-174357-10	2615V2-AI-B24 (24-30)	Total/NA	Solid	Moisture	
500-174357-11	2615V2-AI-B17 (0-6)	Total/NA	Solid	Moisture	
500-174357-12	2615V2-AI-B17 (6-12)	Total/NA	Solid	Moisture	
500-174357-13	2615V2-AI-B17 (12-18)	Total/NA	Solid	Moisture	
500-174357-14	2615V2-AI-B17 (18-24)	Total/NA	Solid	Moisture	
500-174357-15	2615V2-AI-B17 (24-30)	Total/NA	Solid	Moisture	
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	Moisture	
500-174357-17	2615V2-AI-B14 (6-12)	Total/NA	Solid	Moisture	
500-174357-18	2615V2-AI-B14 (12-18)	Total/NA	Solid	Moisture	
500-174357-19	2615V2-AI-B14 (18-24)	Total/NA	Solid	Moisture	
500-174357-20	2615V2-AI-B14 (24-30)	Total/NA	Solid	Moisture	
500-174357-6 DU	2615V2-AI-B24 (0-6)	Total/NA	Solid	Moisture	

Prep Batch: 519148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	9010B	
MB 500-519148/1-A	Method Blank	Total/NA	Solid	9010B	
HLCS 500-519148/2-A	Lab Control Sample	Total/NA	Solid	9010B	
LCS 500-519148/3-A	Lab Control Sample	Total/NA	Solid	9010B	

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

General Chemistry (Continued)

Prep Batch: 519148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 500-519148/4-A	Lab Control Sample	Total/NA	Solid	9010B	

Analysis Batch: 519223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	9014	519148
MB 500-519148/1-A	Method Blank	Total/NA	Solid	9014	519148
HLCS 500-519148/2-A	Lab Control Sample	Total/NA	Solid	9014	519148
LCS 500-519148/3-A	Lab Control Sample	Total/NA	Solid	9014	519148
LLCS 500-519148/4-A	Lab Control Sample	Total/NA	Solid	9014	519148

Prep Batch: 519622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	7.3.4	
MB 500-519622/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 500-519622/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
500-174357-16 MS	2615V2-AI-B14 (0-6)	Total/NA	Solid	7.3.4	
500-174357-16 MSD	2615V2-AI-B14 (0-6)	Total/NA	Solid	7.3.4	

Analysis Batch: 519646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	7.3.4	519622
MB 500-519622/1-A	Method Blank	Total/NA	Solid	7.3.4	519622
LCS 500-519622/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	519622
500-174357-16 MS	2615V2-AI-B14 (0-6)	Total/NA	Solid	7.3.4	519622
500-174357-16 MSD	2615V2-AI-B14 (0-6)	Total/NA	Solid	7.3.4	519622

Analysis Batch: 520558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	9095A	

Analysis Batch: 520887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174357-16	2615V2-AI-B14 (0-6)	Total/NA	Solid	1010A	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - TCLP Volatiles

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
LCS 500-519841/4	Lab Control Sample	99	109	96	102
LCS 500-519909/4	Lab Control Sample	104	107	101	105
MB 500-519841/6	Method Blank	100	108	92	103
MB 500-519909/6	Method Blank	107	106	106	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - TCLP Volatiles

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-174357-16	2615V2-AI-B14 (0-6)	114	97	104	102
500-174357-16 - DL	2615V2-AI-B14 (0-6)	102	103	103	103
LB 500-519571/1-A	Method Blank	111	94	101	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174357-1	2615V2-AI-B18 (0-6)	98	107	104	95
500-174357-2	2615V2-AI-B18 (6-12)	101	104	106	91
500-174357-3	2615V2-AI-B18 (12-18)	101	100	104	94
500-174357-4	2615V2-AI-B18 (18-24)	97	106	107	91
500-174357-5	2615V2-AI-B18 (24-30)	101	105	102	92
500-174357-6	2615V2-AI-B24 (0-6)	99	107	88	89
500-174357-7	2615V2-AI-B24 (6-12)	89	105	67 X	97
500-174357-8	2615V2-AI-B24 (12-18)	103	107	83	91
500-174357-9	2615V2-AI-B24 (18-24)	105	103	107	90
500-174357-10	2615V2-AI-B24 (24-30)	101	104	106	88
500-174357-12	2615V2-AI-B17 (6-12)	101	112	108	90
500-174357-13	2615V2-AI-B17 (12-18)	98	105	106	89
500-174357-14	2615V2-AI-B17 (18-24)	92	99	93	95
500-174357-15	2615V2-AI-B17 (24-30)	101	107	107	89
500-174357-17	2615V2-AI-B14 (6-12)	102	108	110	88
500-174357-18	2615V2-AI-B14 (12-18)	93	108	88	98
500-174357-19	2615V2-AI-B14 (18-24)	95	107	88	98
500-174357-20	2615V2-AI-B14 (24-30)	92	111	88	97

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Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(70-134)	(75-131)	(75-126)	(75-124)
LCS 500-519634/4	Lab Control Sample	93	86	104	92
LCS 500-519702/4	Lab Control Sample	84	97	85	97
LCS 500-519938/4	Lab Control Sample	86	91	89	98
LCSD 500-519634/5	Lab Control Sample Dup	91	89	104	93
LCSD 500-519702/5	Lab Control Sample Dup	85	96	84	97
MB 500-519634/7	Method Blank	100	92	111	88
MB 500-519702/7	Method Blank	86	101	85	95
MB 500-519938/6	Method Blank	86	96	88	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(75-126)	(72-124)	(75-120)	(75-120)
500-174357-11	2615V2-AI-B17 (0-6)	108	105	102	101
500-174357-11 - DL	2615V2-AI-B17 (0-6)	110	100	104	101
500-174357-16 - DL	2615V2-AI-B14 (0-6)	106	102	102	104
500-174357-16	2615V2-AI-B14 (0-6)	106	99	102	103
LCS 500-520186/4	Lab Control Sample	101	104	99	107
MB 500-520186/6	Method Blank	108	103	104	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPHL
		(31-166)	(30-153)	(37-147)	(43-145)	(31-143)	(42-157)
500-174357-1	2615V2-AI-B18 (0-6)	63	54	67	71	43	74
500-174357-1 MS	2615V2-AI-B18 (0-6)	45	39	49	53	29 X	49
500-174357-1 MSD	2615V2-AI-B18 (0-6)	67	71	70	70	83	73
500-174357-2	2615V2-AI-B18 (6-12)	79	83	106	88	57	120
500-174357-3	2615V2-AI-B18 (12-18)	95	92	130	110	83	126
500-174357-4	2615V2-AI-B18 (18-24)	80	82	116	97	67	115
500-174357-5	2615V2-AI-B18 (24-30)	94	83	110	89	76	116
500-174357-6	2615V2-AI-B24 (0-6)	9 X	10 X	55	74	0 X	75
500-174357-7	2615V2-AI-B24 (6-12)	0 X	38	65	95	0 X	97
500-174357-8	2615V2-AI-B24 (12-18)	0 X	45	66	99	30 X	105
500-174357-9	2615V2-AI-B24 (18-24)	81	85	110	95	69	117
500-174357-10	2615V2-AI-B24 (24-30)	79	87	105	94	69	120

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Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174357-11	2615V2-AI-B17 (0-6)	75	79	97	88	77	112
500-174357-12	2615V2-AI-B17 (6-12)	59	71	81	74	65	101
500-174357-13	2615V2-AI-B17 (12-18)	67	76	91	83	59	95
500-174357-14	2615V2-AI-B17 (18-24)	67	72	83	78	63	107
500-174357-15	2615V2-AI-B17 (24-30)	62	74	76	81	73	111
500-174357-16	2615V2-AI-B14 (0-6)	74	81	95	90	66	108
500-174357-17	2615V2-AI-B14 (6-12)	75	86	93	89	65	111
500-174357-18	2615V2-AI-B14 (12-18)	77	83	103	90	77	108
500-174357-19	2615V2-AI-B14 (18-24)	74	81	97	87	71	100
500-174357-20	2615V2-AI-B14 (24-30)	76	73	112	96	82	116
LCS 500-519914/2-A	Lab Control Sample	100	116	107	107	131	101
MB 500-519914/1-A	Method Blank	92	98	101	106	72	107

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (27-110)	PHL (20-100)	NBZ (36-120)	FBP (34-110)	TBP (40-145)	TPHL (40-145)
LCS 500-519489/2-A	Lab Control Sample	62	49	83	102	120	114
MB 500-519489/1-A	Method Blank	63	37	86	96	100	115

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPHL (40-145)	TBP (40-145)
500-174357-16	2615V2-AI-B14 (0-6)	113 X	72	88	46	124	114
LB 500-518975/1-C	Method Blank	100	71	84	37	124	118

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5

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Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Job ID: 500-174357-1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (30-130)	TCX1 (30-120)
LCS 500-519560/2-A	Lab Control Sample	106	98
LCS 500-519560/3-A	Lab Control Sample	105	96
MB 500-519560/1-A	Method Blank	102	100

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (30-130)	TCX1 (30-120)
500-174357-16	2615V2-AI-B14 (0-6)	98	91
500-174357-16 MS	2615V2-AI-B14 (0-6)	103	94
500-174357-16 MS	2615V2-AI-B14 (0-6)	35	37
LB 500-518975/1-G	Method Blank	100	98

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCBP1 (37-121)	TCX1 (49-129)
500-174357-16	2615V2-AI-B14 (0-6)	113	93
LCS 500-519604/3-A	Lab Control Sample	95	104
MB 500-519604/1-A	Method Blank	86	101

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (25-130)
LCS 500-519789/2-A	Lab Control Sample	73
MB 500-519789/1-A	Method Blank	79

Surrogate Legend

DCPAA = DCAA

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Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8151 - TCLP Herbicides

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (25-130)
500-174357-16	2615V2-AI-B14 (0-6)	87
LB 500-518975/1-H	Method Blank	80

Surrogate Legend

DCPAA = DCAA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - TCLP Volatiles

Lab Sample ID: MB 500-519841/6
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
1,1-Dichloroethene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0025	mg/L			12/10/19 18:48	1
Benzene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Carbon tetrachloride	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Chlorobenzene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Chloroform	<0.0020		0.0020	0.0010	mg/L			12/10/19 18:48	1
Tetrachloroethene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Trichloroethene	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1
Vinyl chloride	<0.0010		0.0010	0.00050	mg/L			12/10/19 18:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		12/10/19 18:48	1
4-Bromofluorobenzene (Surr)	108		72 - 124		12/10/19 18:48	1
Dibromofluoromethane	92		75 - 120		12/10/19 18:48	1
Toluene-d8 (Surr)	103		75 - 120		12/10/19 18:48	1

Lab Sample ID: LCS 500-519841/4
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0445		mg/L		89	68 - 127
1,1-Dichloroethene	0.0500	0.0479		mg/L		96	67 - 122
Methyl Ethyl Ketone	0.0500	0.0412		mg/L		82	46 - 144
Benzene	0.0500	0.0468		mg/L		94	70 - 120
Carbon tetrachloride	0.0500	0.0452		mg/L		90	59 - 133
Chlorobenzene	0.0500	0.0447		mg/L		89	70 - 120
Chloroform	0.0500	0.0447		mg/L		89	70 - 120
Tetrachloroethene	0.0500	0.0450		mg/L		90	70 - 128
Trichloroethene	0.0500	0.0454		mg/L		91	70 - 125
Vinyl chloride	0.0500	0.0587		mg/L		117	64 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		75 - 126
4-Bromofluorobenzene (Surr)	109		72 - 124
Dibromofluoromethane	96		75 - 120
Toluene-d8 (Surr)	102		75 - 120

Lab Sample ID: MB 500-519909/6
Matrix: Solid
Analysis Batch: 519909

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
1,1-Dichloroethene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Methyl Ethyl Ketone	<0.0050		0.0050	0.0025	mg/L			12/11/19 11:16	1
Benzene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: MB 500-519909/6
Matrix: Solid
Analysis Batch: 519909

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Chlorobenzene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Chloroform	<0.0020		0.0020	0.0010	mg/L			12/11/19 11:16	1
Tetrachloroethene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Trichloroethene	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1
Vinyl chloride	<0.0010		0.0010	0.00050	mg/L			12/11/19 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		12/11/19 11:16	1
4-Bromofluorobenzene (Surr)	106		72 - 124		12/11/19 11:16	1
Dibromofluoromethane	106		75 - 120		12/11/19 11:16	1
Toluene-d8 (Surr)	102		75 - 120		12/11/19 11:16	1

Lab Sample ID: LCS 500-519909/4
Matrix: Solid
Analysis Batch: 519909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0491		mg/L		98	68 - 127
1,1-Dichloroethene	0.0500	0.0467		mg/L		93	67 - 122
Methyl Ethyl Ketone	0.0500	0.0402		mg/L		80	46 - 144
Benzene	0.0500	0.0464		mg/L		93	70 - 120
Carbon tetrachloride	0.0500	0.0488		mg/L		98	59 - 133
Chlorobenzene	0.0500	0.0478		mg/L		96	70 - 120
Chloroform	0.0500	0.0460		mg/L		92	70 - 120
Tetrachloroethene	0.0500	0.0437		mg/L		87	70 - 128
Trichloroethene	0.0500	0.0461		mg/L		92	70 - 125
Vinyl chloride	0.0500	0.0500		mg/L		100	64 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		75 - 126
4-Bromofluorobenzene (Surr)	107		72 - 124
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	105		75 - 120

Lab Sample ID: LB 500-519571/1-A
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
1,1-Dichloroethene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Methyl Ethyl Ketone	<0.10		0.10	0.050	mg/L			12/10/19 19:13	20
Benzene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Carbon tetrachloride	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Chlorobenzene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Chloroform	<0.040		0.040	0.020	mg/L			12/10/19 19:13	20
Tetrachloroethene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: LB 500-519571/1-A
Matrix: Solid
Analysis Batch: 519841

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20
Vinyl chloride	<0.020		0.020	0.010	mg/L			12/10/19 19:13	20

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		12/10/19 19:13	20
4-Bromofluorobenzene (Surr)	111		72 - 124		12/10/19 19:13	20
Dibromofluoromethane	94		75 - 120		12/10/19 19:13	20
Toluene-d8 (Surr)	104		75 - 120		12/10/19 19:13	20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-519634/7
Matrix: Solid
Analysis Batch: 519634

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/10/19 00:20	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/10/19 00:20	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/10/19 00:20	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 00:20	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/10/19 00:20	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/10/19 00:20	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 00:20	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/10/19 00:20	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/10/19 00:20	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/10/19 00:20	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/10/19 00:20	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/10/19 00:20	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/10/19 00:20	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/10/19 00:20	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/10/19 00:20	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/10/19 00:20	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/10/19 00:20	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/10/19 00:20	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/10/19 00:20	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/10/19 00:20	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 00:20	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/10/19 00:20	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/10/19 00:20	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/10/19 00:20	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/10/19 00:20	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/10/19 00:20	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/10/19 00:20	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/10/19 00:20	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/10/19 00:20	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/10/19 00:20	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/10/19 00:20	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/10/19 00:20	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/10/19 00:20	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519634/7
Matrix: Solid
Analysis Batch: 519634

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/10/19 00:20	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/10/19 00:20	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/10/19 00:20	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/10/19 00:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 134		12/10/19 00:20	1
4-Bromofluorobenzene (Surr)	92		75 - 131		12/10/19 00:20	1
Dibromofluoromethane	111		75 - 126		12/10/19 00:20	1
Toluene-d8 (Surr)	88		75 - 124		12/10/19 00:20	1

Lab Sample ID: LCS 500-519634/4
Matrix: Solid
Analysis Batch: 519634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0553		mg/Kg		111	70 - 128
1,1,1,2-Tetrachloroethane	0.0500	0.0369		mg/Kg		74	70 - 122
1,1,1,2-Trichloroethane	0.0500	0.0414		mg/Kg		83	70 - 125
1,1-Dichloroethane	0.0500	0.0512		mg/Kg		102	70 - 125
1,2-Dichloroethane	0.0500	0.0516		mg/Kg		103	70 - 130
1,2-Dichloropropane	0.0500	0.0464		mg/Kg		93	70 - 125
1,1-Dichloroethene	0.0500	0.0544		mg/Kg		109	70 - 120
2-Butanone (MEK)	0.0500	0.0295		mg/Kg		59	47 - 138
2-Hexanone	0.0500	0.0285		mg/Kg		57	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0339		mg/Kg		68	50 - 148
Acetone	0.0500	0.0351		mg/Kg		70	40 - 150
Benzene	0.0500	0.0523		mg/Kg		105	70 - 125
Bromodichloromethane	0.0500	0.0518		mg/Kg		104	67 - 129
Bromoform	0.0500	0.0453		mg/Kg		91	68 - 136
Bromomethane	0.0500	0.0680	*	mg/Kg		136	70 - 130
Carbon disulfide	0.0500	0.0519		mg/Kg		104	70 - 129
Carbon tetrachloride	0.0500	0.0561		mg/Kg		112	75 - 125
Chlorobenzene	0.0500	0.0447		mg/Kg		89	50 - 150
Chloroethane	0.0500	0.0665	*	mg/Kg		133	75 - 125
Chloroform	0.0500	0.0528		mg/Kg		106	57 - 135
Chloromethane	0.0500	0.0619		mg/Kg		124	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0548		mg/Kg		110	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0404		mg/Kg		81	70 - 125
Dibromochloromethane	0.0500	0.0434		mg/Kg		87	69 - 125
Ethylbenzene	0.0500	0.0509		mg/Kg		102	61 - 136
Methyl tert-butyl ether	0.0500	0.0520		mg/Kg		104	50 - 140
Methylene Chloride	0.0500	0.0562		mg/Kg		112	70 - 126
Styrene	0.0500	0.0450		mg/Kg		90	70 - 125
Tetrachloroethene	0.0500	0.0463		mg/Kg		93	70 - 124
Toluene	0.0500	0.0457		mg/Kg		91	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0550		mg/Kg		110	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0394		mg/Kg		79	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519634/4
Matrix: Solid
Analysis Batch: 519634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	0.0500	0.0572		mg/Kg		114	70 - 125
Vinyl acetate	0.0500	0.0452		mg/Kg		90	40 - 153
Vinyl chloride	0.0500	0.0581		mg/Kg		116	70 - 125
Xylenes, Total	0.100	0.128		mg/Kg		128	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 134
4-Bromofluorobenzene (Surr)	86		75 - 131
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	92		75 - 124

Lab Sample ID: LCSD 500-519634/5
Matrix: Solid
Analysis Batch: 519634

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0525		mg/Kg		105	70 - 128	5	30
1,1,1,2-Tetrachloroethane	0.0500	0.0361		mg/Kg		72	70 - 122	2	30
1,1,2-Trichloroethane	0.0500	0.0397		mg/Kg		79	70 - 125	4	30
1,1-Dichloroethane	0.0500	0.0465		mg/Kg		93	70 - 125	10	30
1,2-Dichloroethane	0.0500	0.0481		mg/Kg		96	70 - 130	7	30
1,2-Dichloropropane	0.0500	0.0440		mg/Kg		88	70 - 125	5	30
1,1-Dichloroethene	0.0500	0.0492		mg/Kg		98	70 - 120	10	30
2-Butanone (MEK)	0.0500	0.0325		mg/Kg		65	47 - 138	10	30
2-Hexanone	0.0500	0.0277		mg/Kg		55	48 - 146	3	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0320		mg/Kg		64	50 - 148	6	30
Acetone	0.0500	0.0369		mg/Kg		74	40 - 150	5	30
Benzene	0.0500	0.0490		mg/Kg		98	70 - 125	6	30
Bromodichloromethane	0.0500	0.0484		mg/Kg		97	67 - 129	7	30
Bromoform	0.0500	0.0447		mg/Kg		89	68 - 136	1	30
Bromomethane	0.0500	0.0629		mg/Kg		126	70 - 130	8	30
Carbon disulfide	0.0500	0.0479		mg/Kg		96	70 - 129	8	30
Carbon tetrachloride	0.0500	0.0518		mg/Kg		104	75 - 125	8	30
Chlorobenzene	0.0500	0.0431		mg/Kg		86	50 - 150	4	30
Chloroethane	0.0500	0.0630	*	mg/Kg		126	75 - 125	5	30
Chloroform	0.0500	0.0494		mg/Kg		99	57 - 135	7	30
Chloromethane	0.0500	0.0584		mg/Kg		117	70 - 125	6	30
cis-1,2-Dichloroethene	0.0500	0.0508		mg/Kg		102	70 - 125	8	30
cis-1,3-Dichloropropene	0.0500	0.0394		mg/Kg		79	70 - 125	2	30
Dibromochloromethane	0.0500	0.0432		mg/Kg		86	69 - 125	0	30
Ethylbenzene	0.0500	0.0490		mg/Kg		98	61 - 136	4	30
Methyl tert-butyl ether	0.0500	0.0489		mg/Kg		98	50 - 140	6	30
Methylene Chloride	0.0500	0.0528		mg/Kg		106	70 - 126	6	30
Styrene	0.0500	0.0433		mg/Kg		87	70 - 125	4	30
Tetrachloroethene	0.0500	0.0453		mg/Kg		91	70 - 124	2	30
Toluene	0.0500	0.0442		mg/Kg		88	70 - 125	3	30
trans-1,2-Dichloroethene	0.0500	0.0512		mg/Kg		102	70 - 125	7	30
trans-1,3-Dichloropropene	0.0500	0.0379		mg/Kg		76	70 - 125	4	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-519634/5
Matrix: Solid
Analysis Batch: 519634

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene	0.0500	0.0529		mg/Kg		106	70 - 125	8	30
Vinyl acetate	0.0500	0.0447		mg/Kg		89	40 - 153	1	30
Vinyl chloride	0.0500	0.0545		mg/Kg		109	70 - 125	6	30
Xylenes, Total	0.100	0.125		mg/Kg		125	53 - 147	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 134
4-Bromofluorobenzene (Surr)	89		75 - 131
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	93		75 - 124

Lab Sample ID: MB 500-519702/7
Matrix: Solid
Analysis Batch: 519702

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/10/19 11:18	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/10/19 11:18	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/10/19 11:18	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 11:18	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/10/19 11:18	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/10/19 11:18	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 11:18	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/10/19 11:18	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/10/19 11:18	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/10/19 11:18	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/10/19 11:18	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/10/19 11:18	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/10/19 11:18	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/10/19 11:18	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/10/19 11:18	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/10/19 11:18	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/10/19 11:18	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/10/19 11:18	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/10/19 11:18	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/10/19 11:18	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 11:18	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/10/19 11:18	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/10/19 11:18	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/10/19 11:18	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/10/19 11:18	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/10/19 11:18	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/10/19 11:18	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/10/19 11:18	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/10/19 11:18	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/10/19 11:18	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/10/19 11:18	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/10/19 11:18	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519702/7

Matrix: Solid

Analysis Batch: 519702

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/10/19 11:18	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/10/19 11:18	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/10/19 11:18	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/10/19 11:18	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/10/19 11:18	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	86		70 - 134		12/10/19 11:18	1
4-Bromofluorobenzene (Surr)	101		75 - 131		12/10/19 11:18	1
Dibromofluoromethane	85		75 - 126		12/10/19 11:18	1
Toluene-d8 (Surr)	95		75 - 124		12/10/19 11:18	1

Lab Sample ID: LCS 500-519702/4

Matrix: Solid

Analysis Batch: 519702

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 128
1,1,1,2-Tetrachloroethane	0.0500	0.0443		mg/Kg		89	70 - 122
1,1,2-Trichloroethane	0.0500	0.0460		mg/Kg		92	70 - 125
1,1-Dichloroethane	0.0500	0.0454		mg/Kg		91	70 - 125
1,2-Dichloroethane	0.0500	0.0437		mg/Kg		87	70 - 130
1,2-Dichloropropane	0.0500	0.0471		mg/Kg		94	70 - 125
1,1-Dichloroethane	0.0500	0.0432		mg/Kg		86	70 - 120
2-Butanone (MEK)	0.0500	0.0345		mg/Kg		69	47 - 138
2-Hexanone	0.0500	0.0343		mg/Kg		69	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0340		mg/Kg		68	50 - 148
Acetone	0.0500	0.0685		mg/Kg		137	40 - 150
Benzene	0.0500	0.0461		mg/Kg		92	70 - 125
Bromodichloromethane	0.0500	0.0436		mg/Kg		87	67 - 129
Bromoform	0.0500	0.0380		mg/Kg		76	68 - 136
Bromomethane	0.0500	0.0488		mg/Kg		98	70 - 130
Carbon disulfide	0.0500	0.0422		mg/Kg		84	70 - 129
Carbon tetrachloride	0.0500	0.0434		mg/Kg		87	75 - 125
Chlorobenzene	0.0500	0.0479		mg/Kg		96	50 - 150
Chloroethane	0.0500	0.0525		mg/Kg		105	75 - 125
Chloroform	0.0500	0.0435		mg/Kg		87	57 - 135
Chloromethane	0.0500	0.0463		mg/Kg		93	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0436		mg/Kg		87	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0466		mg/Kg		93	70 - 125
Dibromochloromethane	0.0500	0.0415		mg/Kg		83	69 - 125
Ethylbenzene	0.0500	0.0472		mg/Kg		94	61 - 136
Methyl tert-butyl ether	0.0500	0.0440		mg/Kg		88	50 - 140
Methylene Chloride	0.0500	0.0450		mg/Kg		90	70 - 126
Styrene	0.0500	0.0456		mg/Kg		91	70 - 125
Tetrachloroethene	0.0500	0.0463		mg/Kg		93	70 - 124
Toluene	0.0500	0.0477		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0436		mg/Kg		87	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519702/4

Matrix: Solid

Analysis Batch: 519702

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	0.0500	0.0454		mg/Kg		91	70 - 125
Trichloroethene	0.0500	0.0461		mg/Kg		92	70 - 125
Vinyl acetate	0.0500	0.0395		mg/Kg		79	40 - 153
Vinyl chloride	0.0500	0.0458		mg/Kg		92	70 - 125
Xylenes, Total	0.100	0.0949		mg/Kg		95	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 134
4-Bromofluorobenzene (Surr)	97		75 - 131
Dibromofluoromethane	85		75 - 126
Toluene-d8 (Surr)	97		75 - 124

Lab Sample ID: LCSD 500-519702/5

Matrix: Solid

Analysis Batch: 519702

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0443		mg/Kg		89	70 - 128	0	30
1,1,1,2-Tetrachloroethane	0.0500	0.0434		mg/Kg		87	70 - 122	2	30
1,1,2-Trichloroethane	0.0500	0.0459		mg/Kg		92	70 - 125	0	30
1,1-Dichloroethane	0.0500	0.0457		mg/Kg		91	70 - 125	1	30
1,2-Dichloroethane	0.0500	0.0439		mg/Kg		88	70 - 130	1	30
1,2-Dichloropropane	0.0500	0.0470		mg/Kg		94	70 - 125	0	30
1,1-Dichloroethane	0.0500	0.0436		mg/Kg		87	70 - 120	1	30
2-Butanone (MEK)	0.0500	0.0332		mg/Kg		66	47 - 138	4	30
2-Hexanone	0.0500	0.0337		mg/Kg		67	48 - 146	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0334		mg/Kg		67	50 - 148	2	30
Acetone	0.0500	0.0543		mg/Kg		109	40 - 150	23	30
Benzene	0.0500	0.0471		mg/Kg		94	70 - 125	2	30
Bromodichloromethane	0.0500	0.0438		mg/Kg		88	67 - 129	1	30
Bromoform	0.0500	0.0383		mg/Kg		77	68 - 136	1	30
Bromomethane	0.0500	0.0473		mg/Kg		95	70 - 130	3	30
Carbon disulfide	0.0500	0.0430		mg/Kg		86	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0451		mg/Kg		90	75 - 125	4	30
Chlorobenzene	0.0500	0.0491		mg/Kg		98	50 - 150	3	30
Chloroethane	0.0500	0.0510		mg/Kg		102	75 - 125	3	30
Chloroform	0.0500	0.0438		mg/Kg		88	57 - 135	1	30
Chloromethane	0.0500	0.0452		mg/Kg		90	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0482		mg/Kg		96	70 - 125	3	30
Dibromochloromethane	0.0500	0.0414		mg/Kg		83	69 - 125	0	30
Ethylbenzene	0.0500	0.0474		mg/Kg		95	61 - 136	0	30
Methyl tert-butyl ether	0.0500	0.0442		mg/Kg		88	50 - 140	0	30
Methylene Chloride	0.0500	0.0450		mg/Kg		90	70 - 126	0	30
Styrene	0.0500	0.0461		mg/Kg		92	70 - 125	1	30
Tetrachloroethene	0.0500	0.0474		mg/Kg		95	70 - 124	2	30
Toluene	0.0500	0.0491		mg/Kg		98	70 - 125	3	30
trans-1,2-Dichloroethene	0.0500	0.0447		mg/Kg		89	70 - 125	2	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-519702/5
Matrix: Solid
Analysis Batch: 519702

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	0.0500	0.0456		mg/Kg		91	70 - 125	1	30
Trichloroethene	0.0500	0.0463		mg/Kg		93	70 - 125	0	30
Vinyl acetate	0.0500	0.0402		mg/Kg		80	40 - 153	2	30
Vinyl chloride	0.0500	0.0450		mg/Kg		90	70 - 125	2	30
Xylenes, Total	0.100	0.0963		mg/Kg		96	53 - 147	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	84		75 - 126
Toluene-d8 (Surr)	97		75 - 124

Lab Sample ID: MB 500-519938/6
Matrix: Solid
Analysis Batch: 519938

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/11/19 10:59	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/11/19 10:59	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/11/19 10:59	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/11/19 10:59	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/11/19 10:59	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/11/19 10:59	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/11/19 10:59	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/11/19 10:59	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/11/19 10:59	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/11/19 10:59	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/11/19 10:59	1
Acetone	<0.0020		0.0020	0.00087	mg/Kg			12/11/19 10:59	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/11/19 10:59	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/11/19 10:59	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/11/19 10:59	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/11/19 10:59	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/11/19 10:59	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/11/19 10:59	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/11/19 10:59	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/11/19 10:59	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/11/19 10:59	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/11/19 10:59	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/11/19 10:59	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/11/19 10:59	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/11/19 10:59	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/11/19 10:59	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/11/19 10:59	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/11/19 10:59	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/11/19 10:59	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/11/19 10:59	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/11/19 10:59	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519938/6
Matrix: Solid
Analysis Batch: 519938

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/11/19 10:59	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/11/19 10:59	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/11/19 10:59	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/11/19 10:59	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/11/19 10:59	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/11/19 10:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134		12/11/19 10:59	1
4-Bromofluorobenzene (Surr)	96		75 - 131		12/11/19 10:59	1
Dibromofluoromethane	88		75 - 126		12/11/19 10:59	1
Toluene-d8 (Surr)	94		75 - 124		12/11/19 10:59	1

Lab Sample ID: LCS 500-519938/4
Matrix: Solid
Analysis Batch: 519938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0457		mg/Kg		91	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0411		mg/Kg		82	70 - 122
1,1,2-Trichloroethane	0.0500	0.0420		mg/Kg		84	70 - 125
1,1-Dichloroethane	0.0500	0.0472		mg/Kg		94	70 - 125
1,2-Dichloroethane	0.0500	0.0424		mg/Kg		85	70 - 130
1,2-Dichloropropane	0.0500	0.0432		mg/Kg		86	70 - 125
1,1-Dichloroethene	0.0500	0.0467		mg/Kg		93	70 - 120
2-Butanone (MEK)	0.0500	0.0405		mg/Kg		81	47 - 138
2-Hexanone	0.0500	0.0410		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0407		mg/Kg		81	50 - 148
Acetone	0.0500	0.0473		mg/Kg		95	40 - 150
Benzene	0.0500	0.0457		mg/Kg		91	70 - 125
Bromodichloromethane	0.0500	0.0399		mg/Kg		80	67 - 129
Bromoform	0.0500	0.0370		mg/Kg		74	68 - 136
Bromomethane	0.0500	0.0398		mg/Kg		80	70 - 130
Carbon disulfide	0.0500	0.0467		mg/Kg		93	70 - 129
Carbon tetrachloride	0.0500	0.0454		mg/Kg		91	75 - 125
Chlorobenzene	0.0500	0.0459		mg/Kg		92	50 - 150
Chloroethane	0.0500	0.0450		mg/Kg		90	75 - 125
Chloroform	0.0500	0.0437		mg/Kg		87	57 - 135
Chloromethane	0.0500	0.0428		mg/Kg		86	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0455		mg/Kg		91	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0428		mg/Kg		86	70 - 125
Dibromochloromethane	0.0500	0.0388		mg/Kg		78	69 - 125
Ethylbenzene	0.0500	0.0460		mg/Kg		92	61 - 136
Methyl tert-butyl ether	0.0500	0.0467		mg/Kg		93	50 - 140
Methylene Chloride	0.0500	0.0455		mg/Kg		91	70 - 126
Styrene	0.0500	0.0443		mg/Kg		89	70 - 125
Tetrachloroethene	0.0500	0.0452		mg/Kg		90	70 - 124
Toluene	0.0500	0.0468		mg/Kg		94	70 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519938/4
Matrix: Solid
Analysis Batch: 519938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0500	0.0469		mg/Kg		94	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0402		mg/Kg		80	70 - 125
Trichloroethene	0.0500	0.0444		mg/Kg		89	70 - 125
Vinyl acetate	0.0500	0.0362		mg/Kg		72	40 - 153
Vinyl chloride	0.0500	0.0431		mg/Kg		86	70 - 125
Xylenes, Total	0.100	0.0937		mg/Kg		94	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	89		75 - 126
Toluene-d8 (Surr)	98		75 - 124

Lab Sample ID: MB 500-520186/6
Matrix: Solid
Analysis Batch: 520186

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0010		0.0010	0.00038	mg/Kg			12/12/19 11:39	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0010	0.00040	mg/Kg			12/12/19 11:39	1
1,1,2-Trichloroethane	<0.0010		0.0010	0.00035	mg/Kg			12/12/19 11:39	1
1,1-Dichloroethane	<0.0010		0.0010	0.00041	mg/Kg			12/12/19 11:39	1
1,2-Dichloroethane	<0.0010		0.0010	0.00039	mg/Kg			12/12/19 11:39	1
1,2-Dichloropropane	<0.0010		0.0010	0.00043	mg/Kg			12/12/19 11:39	1
1,1-Dichloroethene	<0.0010		0.0010	0.00039	mg/Kg			12/12/19 11:39	1
1,3-Dichloropropene, Total	<0.0010		0.0010	0.00042	mg/Kg			12/12/19 11:39	1
2-Butanone (MEK)	<0.0050		0.0050	0.0021	mg/Kg			12/12/19 11:39	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/12/19 11:39	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0022	mg/Kg			12/12/19 11:39	1
Acetone	<0.010		0.010	0.0017	mg/Kg			12/12/19 11:39	1
Benzene	<0.00025		0.00025	0.00015	mg/Kg			12/12/19 11:39	1
Bromodichloromethane	<0.0010		0.0010	0.00037	mg/Kg			12/12/19 11:39	1
Bromoform	<0.0010		0.0010	0.00048	mg/Kg			12/12/19 11:39	1
Bromomethane	<0.0030		0.0030	0.00080	mg/Kg			12/12/19 11:39	1
Carbon disulfide	<0.0020		0.0020	0.00080	mg/Kg			12/12/19 11:39	1
Carbon tetrachloride	<0.0010		0.0010	0.00038	mg/Kg			12/12/19 11:39	1
Chlorobenzene	<0.0010		0.0010	0.00039	mg/Kg			12/12/19 11:39	1
Chloroethane	<0.0010		0.0010	0.00050	mg/Kg			12/12/19 11:39	1
Chloroform	<0.0020		0.0020	0.00037	mg/Kg			12/12/19 11:39	1
Chloromethane	<0.0010		0.0010	0.00032	mg/Kg			12/12/19 11:39	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00041	mg/Kg			12/12/19 11:39	1
cis-1,3-Dichloropropene	<0.0010		0.0010	0.00042	mg/Kg			12/12/19 11:39	1
Dibromochloromethane	<0.0010		0.0010	0.00049	mg/Kg			12/12/19 11:39	1
Ethylbenzene	<0.00025		0.00025	0.00018	mg/Kg			12/12/19 11:39	1
Methyl tert-butyl ether	<0.0010		0.0010	0.00039	mg/Kg			12/12/19 11:39	1
Methylene Chloride	<0.0050		0.0050	0.0016	mg/Kg			12/12/19 11:39	1
Styrene	<0.0010		0.0010	0.00039	mg/Kg			12/12/19 11:39	1
Tetrachloroethene	<0.0010		0.0010	0.00037	mg/Kg			12/12/19 11:39	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-520186/6
Matrix: Solid
Analysis Batch: 520186

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00025		0.00025	0.00015	mg/Kg			12/12/19 11:39	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00035	mg/Kg			12/12/19 11:39	1
trans-1,3-Dichloropropene	<0.0010		0.0010	0.00036	mg/Kg			12/12/19 11:39	1
Trichloroethene	<0.00050		0.00050	0.00016	mg/Kg			12/12/19 11:39	1
Vinyl acetate	<0.0020		0.0020	0.00090	mg/Kg			12/12/19 11:39	1
Vinyl chloride	<0.0010		0.0010	0.00026	mg/Kg			12/12/19 11:39	1
Xylenes, Total	<0.00050		0.00050	0.00022	mg/Kg			12/12/19 11:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		12/12/19 11:39	1
4-Bromofluorobenzene (Surr)	103		72 - 124		12/12/19 11:39	1
Dibromofluoromethane	104		75 - 120		12/12/19 11:39	1
Toluene-d8 (Surr)	105		75 - 120		12/12/19 11:39	1

Lab Sample ID: LCS 500-520186/4
Matrix: Solid
Analysis Batch: 520186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0530		mg/Kg		106	70 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.0469		mg/Kg		94	62 - 140
1,1,2-Trichloroethane	0.0500	0.0454		mg/Kg		91	71 - 130
1,1-Dichloroethane	0.0500	0.0504		mg/Kg		101	70 - 125
1,2-Dichloroethane	0.0500	0.0496		mg/Kg		99	68 - 127
1,2-Dichloropropane	0.0500	0.0459		mg/Kg		92	67 - 130
1,1-Dichloroethene	0.0500	0.0535		mg/Kg		107	67 - 122
2-Butanone (MEK)	0.0500	0.0423		mg/Kg		85	46 - 144
2-Hexanone	0.0500	0.0453		mg/Kg		91	54 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0432		mg/Kg		86	55 - 139
Acetone	0.0500	0.0410		mg/Kg		82	40 - 143
Benzene	0.0500	0.0486		mg/Kg		97	70 - 120
Bromodichloromethane	0.0500	0.0462		mg/Kg		92	69 - 120
Bromoform	0.0500	0.0458		mg/Kg		92	56 - 132
Bromomethane	0.0500	0.0509		mg/Kg		102	40 - 152
Carbon disulfide	0.0500	0.0497		mg/Kg		99	66 - 120
Carbon tetrachloride	0.0500	0.0534		mg/Kg		107	59 - 133
Chlorobenzene	0.0500	0.0496		mg/Kg		99	70 - 120
Chloroethane	0.0500	0.0421		mg/Kg		84	48 - 136
Chloroform	0.0500	0.0468		mg/Kg		94	70 - 120
Chloromethane	0.0500	0.0526		mg/Kg		105	56 - 152
cis-1,2-Dichloroethene	0.0500	0.0484		mg/Kg		97	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0491		mg/Kg		98	64 - 127
Dibromochloromethane	0.0500	0.0459		mg/Kg		92	68 - 125
Ethylbenzene	0.0500	0.0521		mg/Kg		104	70 - 123
Methyl tert-butyl ether	0.0500	0.0457		mg/Kg		91	55 - 123
Methylene Chloride	0.0500	0.0472		mg/Kg		94	69 - 125
Styrene	0.0500	0.0482		mg/Kg		96	70 - 120
Tetrachloroethene	0.0500	0.0483		mg/Kg		97	70 - 128

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-520186/4
Matrix: Solid
Analysis Batch: 520186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.0500	0.0508		mg/Kg		102	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0522		mg/Kg		104	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0476		mg/Kg		95	62 - 128
Trichloroethene	0.0500	0.0483		mg/Kg		97	70 - 125
Vinyl acetate	0.0500	0.0372		mg/Kg		74	43 - 133
Vinyl chloride	0.0500	0.0497		mg/Kg		99	64 - 126
Xylenes, Total	0.100	0.104		mg/Kg		104	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	104		72 - 124
Dibromofluoromethane	99		75 - 120
Toluene-d8 (Surr)	107		75 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-519489/1-A
Matrix: Solid
Analysis Batch: 519544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519489

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0020		0.0020	0.0020	mg/L		12/09/19 08:15	12/09/19 15:52	1
Cresol, o-	<0.0020		0.0020	0.0020	mg/L		12/09/19 08:15	12/09/19 15:52	1
Hexachloroethane	<0.0050		0.0050	0.0050	mg/L		12/09/19 08:15	12/09/19 15:52	1
Nitrobenzene	<0.0010		0.0010	0.0010	mg/L		12/09/19 08:15	12/09/19 15:52	1
Pyridine	<0.020		0.020	0.020	mg/L		12/09/19 08:15	12/09/19 15:52	1
Hexachloro-1,3-butadiene	<0.0050		0.0050	0.0050	mg/L		12/09/19 08:15	12/09/19 15:52	1
2,4,6-Trichlorophenol	<0.0050		0.0050	0.0050	mg/L		12/09/19 08:15	12/09/19 15:52	1
2,4,5-Trichlorophenol	<0.010		0.010	0.010	mg/L		12/09/19 08:15	12/09/19 15:52	1
2,4-Dinitrotoluene	<0.0010		0.0010	0.0010	mg/L		12/09/19 08:15	12/09/19 15:52	1
Hexachlorobenzene	<0.00050		0.00050	0.00050	mg/L		12/09/19 08:15	12/09/19 15:52	1
Pentachlorophenol	<0.020		0.020	0.020	mg/L		12/09/19 08:15	12/09/19 15:52	1
m & p - Cresol	<0.0020		0.0020	0.0020	mg/L		12/09/19 08:15	12/09/19 15:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	63		27 - 110	12/09/19 08:15	12/09/19 15:52	1
Phenol-d5	37		20 - 100	12/09/19 08:15	12/09/19 15:52	1
Nitrobenzene-d5	86		36 - 120	12/09/19 08:15	12/09/19 15:52	1
2-Fluorobiphenyl	96		34 - 110	12/09/19 08:15	12/09/19 15:52	1
2,4,6-Tribromophenol	100		40 - 145	12/09/19 08:15	12/09/19 15:52	1
Terphenyl-d14	115		40 - 145	12/09/19 08:15	12/09/19 15:52	1

Lab Sample ID: LCS 500-519489/2-A
Matrix: Solid
Analysis Batch: 519544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519489

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0400	0.0324		mg/L		81	23 - 110

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519489/2-A
Matrix: Solid
Analysis Batch: 519544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519489

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cresol, o-	0.0400	0.0352		mg/L		88	53 - 115
Hexachloroethane	0.0400	0.0292		mg/L		73	20 - 100
Nitrobenzene	0.0400	0.0365		mg/L		91	54 - 121
Pyridine	0.0800	0.0251		mg/L		31	15 - 110
Hexachloro-1,3-butadiene	0.0400	0.0315		mg/L		79	20 - 100
2,4,6-Trichlorophenol	0.0400	0.0444		mg/L		111	62 - 121
2,4,5-Trichlorophenol	0.0400	0.0459		mg/L		115	63 - 124
2,4-Dinitrotoluene	0.0400	0.0454		mg/L		114	63 - 129
Hexachlorobenzene	0.0400	0.0416		mg/L		104	61 - 126
Pentachlorophenol	0.0800	0.0563		mg/L		70	42 - 148
m & p - Cresol	0.0400	0.0327		mg/L		82	50 - 116

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	62		27 - 110
Phenol-d5	49		20 - 100
Nitrobenzene-d5	83		36 - 120
2-Fluorobiphenyl	102		34 - 110
2,4,6-Tribromophenol	120		40 - 145
Terphenyl-d14	114		40 - 145

Lab Sample ID: MB 500-519914/1-A
Matrix: Solid
Analysis Batch: 520171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/11/19 07:45	12/12/19 13:47	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519914/1-A
Matrix: Solid
Analysis Batch: 520171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519914

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/11/19 07:45	12/12/19 13:47	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/11/19 07:45	12/12/19 13:47	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	92		31 - 166	12/11/19 07:45	12/12/19 13:47	1
Phenol-d5	98		30 - 153	12/11/19 07:45	12/12/19 13:47	1
Nitrobenzene-d5	101		37 - 147	12/11/19 07:45	12/12/19 13:47	1
2-Fluorobiphenyl	106		43 - 145	12/11/19 07:45	12/12/19 13:47	1
2,4,6-Tribromophenol	72		31 - 143	12/11/19 07:45	12/12/19 13:47	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519914/1-A
Matrix: Solid
Analysis Batch: 520171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519914

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Terphenyl-d14	107		42 - 157	12/11/19 07:45	12/12/19 13:47	1

Lab Sample ID: LCS 500-519914/2-A
Matrix: Solid
Analysis Batch: 520171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519914

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
Phenol	1.33	1.39		mg/Kg		104	56 - 122
Bis(2-chloroethyl)ether	1.33	1.93	*	mg/Kg		145	55 - 111
1,3-Dichlorobenzene	1.33	1.37		mg/Kg		103	65 - 124
1,4-Dichlorobenzene	1.33	1.39		mg/Kg		104	61 - 110
1,2-Dichlorobenzene	1.33	1.40		mg/Kg		105	62 - 110
2-Methylphenol	1.33	1.40		mg/Kg		105	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.27		mg/Kg		95	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.40		mg/Kg		105	56 - 118
Hexachloroethane	1.33	1.41		mg/Kg		106	60 - 114
2-Chlorophenol	1.33	1.51	*	mg/Kg		113	64 - 110
Nitrobenzene	1.33	1.41		mg/Kg		106	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.49		mg/Kg		112	60 - 112
1,2,4-Trichlorobenzene	1.33	1.49		mg/Kg		111	66 - 117
Isophorone	1.33	1.38		mg/Kg		104	55 - 110
2,4-Dimethylphenol	1.33	1.48	*	mg/Kg		111	60 - 110
Hexachlorobutadiene	1.33	1.47		mg/Kg		110	56 - 120
Naphthalene	1.33	1.43		mg/Kg		107	63 - 110
2,4-Dichlorophenol	1.33	1.38		mg/Kg		104	58 - 120
4-Chloroaniline	1.33	1.06		mg/Kg		80	30 - 150
2,4,6-Trichlorophenol	1.33	1.55		mg/Kg		116	57 - 120
2,4,5-Trichlorophenol	1.33	1.47		mg/Kg		110	50 - 120
Hexachlorocyclopentadiene	1.33	2.59	E *	mg/Kg		194	10 - 133
2-Methylnaphthalene	1.33	1.49		mg/Kg		112	69 - 112
2-Nitroaniline	1.33	1.45		mg/Kg		108	57 - 124
2-Chloronaphthalene	1.33	1.47		mg/Kg		110	69 - 114
4-Chloro-3-methylphenol	1.33	1.45		mg/Kg		108	65 - 122
2,6-Dinitrotoluene	1.33	1.53		mg/Kg		115	70 - 123
2-Nitrophenol	1.33	1.44		mg/Kg		108	60 - 120
3-Nitroaniline	1.33	1.16		mg/Kg		87	40 - 122
Dimethyl phthalate	1.33	1.48		mg/Kg		111	69 - 116
2,4-Dinitrophenol	2.67	1.04		mg/Kg		39	10 - 100
Acenaphthylene	1.33	1.49		mg/Kg		112	68 - 120
2,4-Dinitrotoluene	1.33	1.50		mg/Kg		113	69 - 124
Acenaphthene	1.33	1.51		mg/Kg		113	65 - 124
Dibenzofuran	1.33	1.46		mg/Kg		110	66 - 115
4-Nitrophenol	2.67	3.16		mg/Kg		118	30 - 122
Fluorene	1.33	1.53		mg/Kg		115	62 - 120
4-Nitroaniline	1.33	1.38		mg/Kg		104	60 - 160
4-Bromophenyl phenyl ether	1.33	1.47		mg/Kg		110	68 - 118
Hexachlorobenzene	1.33	1.45		mg/Kg		109	63 - 124
Diethyl phthalate	1.33	1.54		mg/Kg		115	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519914/2-A
Matrix: Solid
Analysis Batch: 520171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
4-Chlorophenyl phenyl ether	1.33	1.48		mg/Kg		111	62 - 119
Pentachlorophenol	2.67	2.90		mg/Kg		109	13 - 112
N-Nitrosodiphenylamine	1.33	1.44		mg/Kg		108	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.30		mg/Kg		49	10 - 110
Phenanthrene	1.33	1.46		mg/Kg		109	62 - 120
Anthracene	1.33	1.48		mg/Kg		111	70 - 114
Carbazole	1.33	1.52		mg/Kg		114	65 - 142
Di-n-butyl phthalate	1.33	1.51		mg/Kg		113	65 - 120
Fluoranthene	1.33	1.51		mg/Kg		113	62 - 120
Pyrene	1.33	1.46		mg/Kg		109	61 - 128
Butyl benzyl phthalate	1.33	1.42		mg/Kg		106	71 - 129
Benzo[a]anthracene	1.33	1.36		mg/Kg		102	67 - 122
Chrysene	1.33	1.35		mg/Kg		101	63 - 120
3,3'-Dichlorobenzidine	1.33	1.06		mg/Kg		80	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.50		mg/Kg		112	72 - 131
Di-n-octyl phthalate	1.33	1.52		mg/Kg		114	68 - 134
Benzo[b]fluoranthene	1.33	1.34		mg/Kg		101	69 - 129
Benzo[k]fluoranthene	1.33	1.50		mg/Kg		113	68 - 127
Benzo[a]pyrene	1.33	1.38		mg/Kg		103	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.39		mg/Kg		104	68 - 130
Dibenz(a,h)anthracene	1.33	1.39		mg/Kg		104	64 - 131
Benzo[g,h,i]perylene	1.33	1.45		mg/Kg		108	72 - 131
3 & 4 Methylphenol	1.33	1.45		mg/Kg		109	57 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	100		31 - 166
Phenol-d5	116		30 - 153
Nitrobenzene-d5	107		37 - 147
2-Fluorobiphenyl	107		43 - 145
2,4,6-Tribromophenol	131		31 - 143
Terphenyl-d14	101		42 - 157

Lab Sample ID: 500-174357-1 MS
Matrix: Solid
Analysis Batch: 520210

Client Sample ID: 2615V2-AI-B18 (0-6)
Prep Type: Total/NA
Prep Batch: 519914

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.22	F2 F1	1.72	0.645	F1	mg/Kg	☼	38	56 - 122
Bis(2-chloroethyl)ether	<0.22	F2 * F1	1.72	0.837	F1	mg/Kg	☼	49	55 - 111
1,3-Dichlorobenzene	<0.22	F2 F1	1.72	0.724	F1	mg/Kg	☼	42	60 - 110
1,4-Dichlorobenzene	<0.22	F2 F1	1.72	0.722	F1	mg/Kg	☼	42	61 - 110
1,2-Dichlorobenzene	<0.22	F2 F1	1.72	0.748	F1	mg/Kg	☼	44	62 - 110
2-Methylphenol	<0.22	F2 F1	1.72	0.793	F1	mg/Kg	☼	46	60 - 120
2,2'-oxybis[1-chloropropane]	<0.22	F2 F1	1.72	0.424	F1	mg/Kg	☼	25	40 - 124
N-Nitrosodi-n-propylamine	<0.086	F2 F1	1.72	0.808	F1	mg/Kg	☼	47	56 - 118
Hexachloroethane	<0.22	F2 F1	1.72	0.514	F1	mg/Kg	☼	30	60 - 114
2-Chlorophenol	<0.22	F2 * F1	1.72	0.821	F1	mg/Kg	☼	48	64 - 110
Nitrobenzene	<0.043	F2 F1	1.72	0.848	F1	mg/Kg	☼	49	60 - 116

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174357-1 MS

Matrix: Solid

Analysis Batch: 520210

Client Sample ID: 2615V2-AI-B18 (0-6)

Prep Type: Total/NA

Prep Batch: 519914

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Bis(2-chloroethoxy)methane	<0.22	F2 F1	1.72	0.873	F1	mg/Kg	☼	51	60 - 112	
1,2,4-Trichlorobenzene	<0.22	F2 F1	1.72	0.757	F1	mg/Kg	☼	44	66 - 117	
Isophorone	<0.22	F1	1.72	0.878	F1	mg/Kg	☼	51	55 - 110	
2,4-Dimethylphenol	<0.43	* F1	1.72	0.885	F1	mg/Kg	☼	52	60 - 110	
Hexachlorobutadiene	<0.22	F2 F1	1.72	0.686	F1	mg/Kg	☼	40	56 - 120	
Naphthalene	<0.043	F2 F1	1.72	0.854	F1	mg/Kg	☼	50	63 - 110	
2,4-Dichlorophenol	<0.43	F2 F1	1.72	0.845	F1	mg/Kg	☼	49	58 - 120	
4-Chloroaniline	<0.86	F2 F1	1.72	0.636	J	mg/Kg	☼	37	30 - 150	
2,4,6-Trichlorophenol	<0.43	F2 F1	1.72	0.710	F1	mg/Kg	☼	41	57 - 120	
2,4,5-Trichlorophenol	<0.43	F2 F1	1.72	0.677	F1	mg/Kg	☼	39	50 - 120	
Hexachlorocyclopentadiene	<0.86	* F1	1.72	<0.86	F1	mg/Kg	☼	0	10 - 133	
2-Methylnaphthalene	<0.086	F2 F1	1.72	0.856	F1	mg/Kg	☼	50	69 - 112	
2-Nitroaniline	<0.22	F2 F1	1.72	0.819	F1	mg/Kg	☼	48	57 - 124	
2-Chloronaphthalene	<0.22	F2 F1	1.72	0.842	F1	mg/Kg	☼	49	69 - 114	
4-Chloro-3-methylphenol	<0.43	F2 F1	1.72	0.878	F1	mg/Kg	☼	51	65 - 122	
2,6-Dinitrotoluene	<0.22	F2 F1	1.72	0.914	F1	mg/Kg	☼	53	70 - 123	
2-Nitrophenol	<0.43	F2 F1	1.72	0.803	F1	mg/Kg	☼	47	60 - 120	
3-Nitroaniline	<0.43		1.72	0.743		mg/Kg	☼	43	40 - 122	
Dimethyl phthalate	<0.22	F2 F1	1.72	0.876	F1	mg/Kg	☼	51	69 - 116	
2,4-Dinitrophenol	<0.86	F1	3.43	<0.86	F1	mg/Kg	☼	0	10 - 100	
Acenaphthylene	<0.043	F2 F1	1.72	0.869	F1	mg/Kg	☼	51	68 - 120	
2,4-Dinitrotoluene	<0.22	F2 F1	1.72	0.921	F1	mg/Kg	☼	54	69 - 124	
Acenaphthene	<0.043	F2 F1	1.72	0.895	F1	mg/Kg	☼	52	65 - 124	
Dibenzofuran	<0.22	F2 F1	1.72	0.915	F1	mg/Kg	☼	53	66 - 115	
4-Nitrophenol	<0.86	F2	3.43	1.90		mg/Kg	☼	55	30 - 122	
Fluorene	<0.043	F2 F1	1.72	0.891	F1	mg/Kg	☼	52	62 - 120	
4-Nitroaniline	<0.43	F2 F1	1.72	0.706	F1	mg/Kg	☼	41	60 - 160	
4-Bromophenyl phenyl ether	<0.22	F2 F1	1.72	0.839	F1	mg/Kg	☼	49	68 - 118	
Hexachlorobenzene	<0.086	F2 F1	1.72	0.778	F1	mg/Kg	☼	45	63 - 124	
Diethyl phthalate	<0.22	F2 F1	1.72	0.891	F1	mg/Kg	☼	52	58 - 120	
4-Chlorophenyl phenyl ether	<0.22	F2 F1	1.72	0.756	F1	mg/Kg	☼	44	62 - 119	
Pentachlorophenol	<0.86	F2	3.43	0.777	J	mg/Kg	☼	23	13 - 112	
N-Nitrosodiphenylamine	<0.22	F1	1.72	1.07	F1	mg/Kg	☼	63	65 - 112	
4,6-Dinitro-2-methylphenol	<0.86	F1	3.43	<0.86	F1	mg/Kg	☼	0	10 - 110	
Phenanthrene	0.044	F2 F1	1.72	0.993	F1	mg/Kg	☼	55	62 - 120	
Anthracene	<0.043	F2 F1	1.72	0.930	F1	mg/Kg	☼	54	70 - 114	
Carbazole	<0.22	F1	1.72	1.08	F1	mg/Kg	☼	63	65 - 142	
Di-n-butyl phthalate	<0.22	F1	1.72	1.05	F1	mg/Kg	☼	61	65 - 120	
Fluoranthene	<0.043	F2 F1	1.72	0.863	F1	mg/Kg	☼	50	62 - 120	
Pyrene	<0.043		1.72	1.05		mg/Kg	☼	61	61 - 128	
Butyl benzyl phthalate	<0.22	F1	1.72	1.11	F1	mg/Kg	☼	65	71 - 129	
Benzo[a]anthracene	<0.043	F2 F1	1.72	0.921	F1	mg/Kg	☼	54	67 - 122	
Chrysene	0.018	J F2 F1	1.72	0.962	F1	mg/Kg	☼	55	63 - 120	
3,3'-Dichlorobenzidine	<0.22		1.72	0.638		mg/Kg	☼	37	35 - 128	
Bis(2-ethylhexyl) phthalate	<0.22	F1	1.72	1.20	F1	mg/Kg	☼	70	72 - 131	
Di-n-octyl phthalate	<0.22	F2 F1	1.72	1.01	F1	mg/Kg	☼	59	68 - 134	
Benzo[b]fluoranthene	<0.043	F2 F1	1.72	0.919	F1	mg/Kg	☼	54	69 - 129	
Benzo[k]fluoranthene	<0.043	F2 F1	1.72	0.969	F1	mg/Kg	☼	56	68 - 127	
Benzo[a]pyrene	<0.043	F1	1.72	0.958	F1	mg/Kg	☼	56	65 - 133	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174357-1 MS

Matrix: Solid

Analysis Batch: 520210

Client Sample ID: 2615V2-AI-B18 (0-6)

Prep Type: Total/NA

Prep Batch: 519914

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Indeno[1,2,3-cd]pyrene	<0.043	F1	1.72	1.07	F1	mg/Kg	☼	62	68 - 130	
Dibenz(a,h)anthracene	<0.043	F1	1.72	0.985	F1	mg/Kg	☼	57	64 - 131	
Benzo[g,h,i]perylene	<0.043	F2 F1	1.72	0.918	F1	mg/Kg	☼	53	72 - 131	
3 & 4 Methylphenol	<0.22	F2 F1	1.72	0.754	F1	mg/Kg	☼	44	57 - 120	
MS MS										
Surrogate	%Recovery	Qualifier	Limits							
2-Fluorophenol	45		31 - 166							
Phenol-d5	39		30 - 153							
Nitrobenzene-d5	49		37 - 147							
2-Fluorobiphenyl	53		43 - 145							
2,4,6-Tribromophenol	29	X	31 - 143							
Terphenyl-d14	49		42 - 157							

Lab Sample ID: 500-174357-1 MSD

Matrix: Solid

Analysis Batch: 520719

Client Sample ID: 2615V2-AI-B18 (0-6)

Prep Type: Total/NA

Prep Batch: 519914

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Phenol	<0.22	F2 F1	1.72	1.19	F2	mg/Kg	☼	69	56 - 122	59	30
Bis(2-chloroethyl)ether	<0.22	F2 * F1	1.72	1.39	F2	mg/Kg	☼	81	55 - 111	49	30
1,3-Dichlorobenzene	<0.22	F2 F1	1.72	1.04	F2	mg/Kg	☼	61	60 - 110	36	30
1,4-Dichlorobenzene	<0.22	F2 F1	1.72	1.04	F2	mg/Kg	☼	61	61 - 110	36	30
1,2-Dichlorobenzene	<0.22	F2 F1	1.72	1.09	F2	mg/Kg	☼	63	62 - 110	37	30
2-Methylphenol	<0.22	F2 F1	1.72	1.11	F2	mg/Kg	☼	65	60 - 120	34	30
2,2'-oxybis[1-chloropropane]	<0.22	F2 F1	1.72	0.998	F2	mg/Kg	☼	58	40 - 124	81	30
N-Nitrosodi-n-propylamine	<0.086	F2 F1	1.72	1.16	F2	mg/Kg	☼	67	56 - 118	35	30
Hexachloroethane	<0.22	F2 F1	1.72	0.892	F1 F2	mg/Kg	☼	52	60 - 114	54	30
2-Chlorophenol	<0.22	F2 * F1	1.72	1.21	F2	mg/Kg	☼	70	64 - 110	38	30
Nitrobenzene	<0.043	F2 F1	1.72	1.19	F2	mg/Kg	☼	69	60 - 116	34	30
Bis(2-chloroethoxy)methane	<0.22	F2 F1	1.72	1.27	F2	mg/Kg	☼	74	60 - 112	37	30
1,2,4-Trichlorobenzene	<0.22	F2 F1	1.72	1.21	F2	mg/Kg	☼	70	66 - 117	46	30
Isophorone	<0.22	F1	1.72	1.18		mg/Kg	☼	68	55 - 110	29	30
2,4-Dimethylphenol	<0.43	* F1	1.72	1.19		mg/Kg	☼	69	60 - 110	29	30
Hexachlorobutadiene	<0.22	F2 F1	1.72	1.20	F2	mg/Kg	☼	70	56 - 120	55	30
Naphthalene	<0.043	F2 F1	1.72	1.18	F2	mg/Kg	☼	69	63 - 110	32	30
2,4-Dichlorophenol	<0.43	F2 F1	1.72	1.24	F2	mg/Kg	☼	72	58 - 120	38	30
4-Chloroaniline	<0.86	F2 F1	1.72	0.448	J F1 F2	mg/Kg	☼	26	30 - 150	35	30
2,4,6-Trichlorophenol	<0.43	F2 F1	1.72	1.24	F2	mg/Kg	☼	72	57 - 120	55	30
2,4,5-Trichlorophenol	<0.43	F2 F1	1.72	1.19	F2	mg/Kg	☼	69	50 - 120	55	30
Hexachlorocyclopentadiene	<0.86	* F1	1.72	0.931		mg/Kg	☼	54	10 - 133	NC	30
2-Methylnaphthalene	<0.086	F2 F1	1.72	1.41	F2	mg/Kg	☼	82	69 - 112	49	30
2-Nitroaniline	<0.22	F2 F1	1.72	1.19	F2	mg/Kg	☼	69	57 - 124	37	30
2-Chloronaphthalene	<0.22	F2 F1	1.72	1.24	F2	mg/Kg	☼	72	69 - 114	39	30
4-Chloro-3-methylphenol	<0.43	F2 F1	1.72	1.24	F2	mg/Kg	☼	72	65 - 122	34	30
2,6-Dinitrotoluene	<0.22	F2 F1	1.72	1.31	F2	mg/Kg	☼	76	70 - 123	36	30
2-Nitrophenol	<0.43	F2 F1	1.72	1.23	F2	mg/Kg	☼	72	60 - 120	42	30
3-Nitroaniline	<0.43		1.72	0.852		mg/Kg	☼	50	40 - 122	14	30
Dimethyl phthalate	<0.22	F2 F1	1.72	1.29	F2	mg/Kg	☼	75	69 - 116	38	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174357-1 MSD

Matrix: Solid

Analysis Batch: 520719

Client Sample ID: 2615V2-AI-B18 (0-6)

Prep Type: Total/NA

Prep Batch: 519914

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
2,4-Dinitrophenol	<0.86	F1	3.44	1.02		mg/Kg	☼	30	10 - 100	NC	30
Acenaphthylene	<0.043	F2 F1	1.72	1.25	F2	mg/Kg	☼	73	68 - 120	36	30
2,4-Dinitrotoluene	<0.22	F2 F1	1.72	1.30	F2	mg/Kg	☼	75	69 - 124	34	30
Acenaphthene	<0.043	F2 F1	1.72	1.30	F2	mg/Kg	☼	76	65 - 124	37	30
Dibenzofuran	<0.22	F2 F1	1.72	1.30	F2	mg/Kg	☼	76	66 - 115	35	30
4-Nitrophenol	<0.86	F2	3.44	2.59	F2	mg/Kg	☼	75	30 - 122	31	30
Fluorene	<0.043	F2 F1	1.72	1.31	F2	mg/Kg	☼	76	62 - 120	38	30
4-Nitroaniline	<0.43	F2 F1	1.72	1.11	F2	mg/Kg	☼	65	60 - 160	45	30
4-Bromophenyl phenyl ether	<0.22	F2 F1	1.72	1.35	F2	mg/Kg	☼	78	68 - 118	46	30
Hexachlorobenzene	<0.086	F2 F1	1.72	1.42	F2	mg/Kg	☼	83	63 - 124	59	30
Diethyl phthalate	<0.22	F2 F1	1.72	1.35	F2	mg/Kg	☼	78	58 - 120	41	30
4-Chlorophenyl phenyl ether	<0.22	F2 F1	1.72	1.29	F2	mg/Kg	☼	75	62 - 119	52	30
Pentachlorophenol	<0.86	F2	3.44	2.23	F2	mg/Kg	☼	65	13 - 112	96	30
N-Nitrosodiphenylamine	<0.22	F1	1.72	1.34		mg/Kg	☼	78	65 - 112	22	30
4,6-Dinitro-2-methylphenol	<0.86	F1	3.44	1.44		mg/Kg	☼	42	10 - 110	NC	30
Phenanthrene	0.044	F2 F1	1.72	1.40	F2	mg/Kg	☼	79	62 - 120	34	30
Anthracene	<0.043	F2 F1	1.72	1.35	F2	mg/Kg	☼	78	70 - 114	37	30
Carbazole	<0.22	F1	1.72	1.39		mg/Kg	☼	81	65 - 142	26	30
Di-n-butyl phthalate	<0.22	F1	1.72	1.40		mg/Kg	☼	81	65 - 120	29	30
Fluoranthene	<0.043	F2 F1	1.72	1.40	F2	mg/Kg	☼	81	62 - 120	47	30
Pyrene	<0.043		1.72	1.36		mg/Kg	☼	79	61 - 128	26	30
Butyl benzyl phthalate	<0.22	F1	1.72	1.31		mg/Kg	☼	76	71 - 129	16	30
Benzo[a]anthracene	<0.043	F2 F1	1.72	1.28	F2	mg/Kg	☼	75	67 - 122	33	30
Chrysene	0.018	J F2 F1	1.72	1.34	F2	mg/Kg	☼	77	63 - 120	33	30
3,3'-Dichlorobenzidine	<0.22		1.72	0.742		mg/Kg	☼	43	35 - 128	15	30
Bis(2-ethylhexyl) phthalate	<0.22	F1	1.72	1.40		mg/Kg	☼	81	72 - 131	16	30
Di-n-octyl phthalate	<0.22	F2 F1	1.72	1.47	F2	mg/Kg	☼	85	68 - 134	37	30
Benzo[b]fluoranthene	<0.043	F2 F1	1.72	1.31	F2	mg/Kg	☼	76	69 - 129	35	30
Benzo[k]fluoranthene	<0.043	F2 F1	1.72	1.33	F2	mg/Kg	☼	77	68 - 127	31	30
Benzo[a]pyrene	<0.043	F1	1.72	1.28		mg/Kg	☼	75	65 - 133	29	30
Indeno[1,2,3-cd]pyrene	<0.043	F1	1.72	1.33		mg/Kg	☼	77	68 - 130	22	30
Dibenz(a,h)anthracene	<0.043	F1	1.72	1.34		mg/Kg	☼	78	64 - 131	30	30
Benzo[g,h,i]perylene	<0.043	F2 F1	1.72	1.40	F2	mg/Kg	☼	81	72 - 131	42	30
3 & 4 Methylphenol	<0.22	F2 F1	1.72	1.16	F2	mg/Kg	☼	68	57 - 120	43	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2-Fluorophenol	67		31 - 166
Phenol-d5	71		30 - 153
Nitrobenzene-d5	70		37 - 147
2-Fluorobiphenyl	70		43 - 145
2,4,6-Tribromophenol	83		31 - 143
Terphenyl-d14	73		42 - 157

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 500-518975/1-C
Matrix: Solid
Analysis Batch: 519544

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519489

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		12/09/19 08:15	12/09/19 15:23	1
Cresol, o-	<0.020		0.020	0.020	mg/L		12/09/19 08:15	12/09/19 15:23	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		12/09/19 08:15	12/09/19 15:23	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		12/09/19 08:15	12/09/19 15:23	1
Pyridine	<0.20		0.20	0.20	mg/L		12/09/19 08:15	12/09/19 15:23	1
Hexachloro-1,3-butadiene	<0.050		0.050	0.050	mg/L		12/09/19 08:15	12/09/19 15:23	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		12/09/19 08:15	12/09/19 15:23	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		12/09/19 08:15	12/09/19 15:23	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		12/09/19 08:15	12/09/19 15:23	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		12/09/19 08:15	12/09/19 15:23	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		12/09/19 08:15	12/09/19 15:23	1
m & p - Cresol	<0.020		0.020	0.020	mg/L		12/09/19 08:15	12/09/19 15:23	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	71		27 - 110	12/09/19 08:15	12/09/19 15:23	1
Phenol-d5	37		20 - 100	12/09/19 08:15	12/09/19 15:23	1
Nitrobenzene-d5	84		36 - 120	12/09/19 08:15	12/09/19 15:23	1
2-Fluorobiphenyl	100		34 - 110	12/09/19 08:15	12/09/19 15:23	1
2,4,6-Tribromophenol	118		40 - 145	12/09/19 08:15	12/09/19 15:23	1
Terphenyl-d14	124		40 - 145	12/09/19 08:15	12/09/19 15:23	1

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 500-519560/1-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.00010		0.00010	0.000050	mg/L		12/09/19 13:27	12/10/19 10:23	1
Endrin	<0.000050		0.000050	0.000025	mg/L		12/09/19 13:27	12/10/19 10:23	1
gamma-BHC (Lindane)	<0.000050		0.000050	0.000025	mg/L		12/09/19 13:27	12/10/19 10:23	1
Heptachlor	<0.000040		0.000040	0.000020	mg/L		12/09/19 13:27	12/10/19 10:23	1
Heptachlor epoxide	<0.000040		0.000040	0.000020	mg/L		12/09/19 13:27	12/10/19 10:23	1
Methoxychlor	<0.00010		0.00010	0.000050	mg/L		12/09/19 13:27	12/10/19 10:23	1
Toxaphene	<0.00050		0.00050	0.00025	mg/L		12/09/19 13:27	12/10/19 10:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	102		30 - 130	12/09/19 13:27	12/10/19 10:23	1
Tetrachloro-m-xylene	100		30 - 120	12/09/19 13:27	12/10/19 10:23	1

Lab Sample ID: LCS 500-519560/2-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Endrin	0.0000996	0.000104		mg/L		104	60 - 132
gamma-BHC (Lindane)	0.0000999	0.0000951		mg/L		95	68 - 120
Heptachlor	0.0000999	0.0000997		mg/L		100	40 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 500-519560/2-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor epoxide	0.000100	0.000109		mg/L		109	64 - 120
Methoxychlor	0.00100	0.000947		mg/L		95	63 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	106		30 - 130
Tetrachloro-m-xylene	98		30 - 120

Lab Sample ID: LCS 500-519560/3-A
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	0.0100	0.0105		mg/L		105	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	105		30 - 130
Tetrachloro-m-xylene	96		30 - 120

Lab Sample ID: LB 500-518975/1-G
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519560

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.010		0.010	0.0050	mg/L		12/09/19 13:27	12/10/19 12:06	1
Endrin	<0.0050		0.0050	0.0025	mg/L		12/09/19 13:27	12/10/19 12:06	1
gamma-BHC (Lindane)	<0.0050		0.0050	0.0025	mg/L		12/09/19 13:27	12/10/19 12:06	1
Heptachlor	<0.0040		0.0040	0.0020	mg/L		12/09/19 13:27	12/10/19 12:06	1
Heptachlor epoxide	<0.0040		0.0040	0.0020	mg/L		12/09/19 13:27	12/10/19 12:06	1
Methoxychlor	<0.010		0.010	0.0050	mg/L		12/09/19 13:27	12/10/19 12:06	1
Toxaphene	<0.050		0.050	0.025	mg/L		12/09/19 13:27	12/10/19 12:06	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	100		30 - 130	12/09/19 13:27	12/10/19 12:06	1
Tetrachloro-m-xylene	98		30 - 120	12/09/19 13:27	12/10/19 12:06	1

Lab Sample ID: 500-174357-16 MS
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: 2615V2-AI-B14 (0-6)
Prep Type: TCLP
Prep Batch: 519560

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin	<0.0050		0.00996	0.0105		mg/L		105	60 - 132
gamma-BHC (Lindane)	<0.0050		0.00999	0.00939		mg/L		94	68 - 120
Heptachlor	<0.0040		0.00999	0.00993		mg/L		99	40 - 120
Heptachlor epoxide	<0.0040		0.0100	0.0108		mg/L		108	64 - 120
Methoxychlor	<0.010		0.100	0.0966		mg/L		97	63 - 135

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 500-174357-16 MS
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: 2615V2-AI-B14 (0-6)
Prep Type: TCLP
Prep Batch: 519560

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	103		30 - 130
Tetrachloro-m-xylene	94		30 - 120

Lab Sample ID: 500-174357-16 MS
Matrix: Solid
Analysis Batch: 519607

Client Sample ID: 2615V2-AI-B14 (0-6)
Prep Type: TCLP
Prep Batch: 519560

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Toxaphene	<0.050	F1	1.00	0.344	F1	mg/L		34	50 - 150

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	35		30 - 130
Tetrachloro-m-xylene	37		30 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-519604/1-A
Matrix: Solid
Analysis Batch: 519618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519604

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.017		0.017	0.0059	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1221	<0.017		0.017	0.0073	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1232	<0.017		0.017	0.0073	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1242	<0.017		0.017	0.0055	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1248	<0.017		0.017	0.0066	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1254	<0.017		0.017	0.0036	mg/Kg		12/09/19 16:08	12/10/19 09:27	1
PCB-1260	<0.017		0.017	0.0082	mg/Kg		12/09/19 16:08	12/10/19 09:27	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl	86		37 - 121	12/09/19 16:08	12/10/19 09:27	1
Tetrachloro-m-xylene	101		49 - 129	12/09/19 16:08	12/10/19 09:27	1

Lab Sample ID: LCS 500-519604/3-A
Matrix: Solid
Analysis Batch: 519618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519604

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
PCB-1016	0.167	0.163		mg/Kg		98	57 - 120
PCB-1260	0.167	0.140		mg/Kg		84	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	95		37 - 121
Tetrachloro-m-xylene	104		49 - 129

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 8151 - TCLP Herbicides

Lab Sample ID: MB 500-519789/1-A
Matrix: Solid
Analysis Batch: 519870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0010		0.0010	0.00050	mg/L		12/10/19 11:27	12/11/19 04:56	1
Silvex (2,4,5-TP)	<0.0010		0.0010	0.00050	mg/L		12/10/19 11:27	12/11/19 04:56	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	79		25 - 130				12/10/19 11:27	12/11/19 04:56	1

Lab Sample ID: LCS 500-519789/2-A
Matrix: Solid
Analysis Batch: 519870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519789
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4-D	0.0101	0.00848		mg/L		84	30 - 115
Silvex (2,4,5-TP)	0.00250	0.00183		mg/L		73	32 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
DCAA	73		25 - 130				

Lab Sample ID: LB 500-518975/1-H
Matrix: Solid
Analysis Batch: 519870

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519789

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 06:32	1
Silvex (2,4,5-TP)	<0.10		0.10	0.050	mg/L		12/10/19 11:27	12/11/19 06:32	1
Surrogate	LB %Recovery	LB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCAA	80		25 - 130				12/10/19 11:27	12/11/19 06:32	1

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-519241/2-A
Matrix: Solid
Analysis Batch: 519680

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519241
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.110		mg/L		110	80 - 120
Barium	0.500	0.498	J	mg/L		100	80 - 120
Beryllium	0.0500	0.0483		mg/L		97	80 - 120
Boron	1.00	0.939		mg/L		94	80 - 120
Cadmium	0.0500	0.0530		mg/L		106	80 - 120
Chromium	0.200	0.196		mg/L		98	80 - 120
Cobalt	0.500	0.521		mg/L		104	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.0986		mg/L		99	80 - 120
Manganese	0.500	0.479		mg/L		96	80 - 120
Nickel	0.500	0.518		mg/L		104	80 - 120
Selenium	0.100	0.112		mg/L		112	80 - 120
Silver	0.0500	0.0549		mg/L		110	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-519241/2-A
Matrix: Solid
Analysis Batch: 519680

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519241
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Zinc	0.500	0.667	*	mg/L		133	80 - 120

Lab Sample ID: MB 500-519275/1-A
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519275

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Barium	<1.0		1.0	0.11	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Boron	<5.0		5.0	0.47	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Cadmium	0.0992	J	0.20	0.036	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Calcium	9.61	J	20	3.4	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Copper	0.581	J	1.0	0.28	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Iron	11.6	J	20	10	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Lead	<0.50		0.50	0.23	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Magnesium	<10		10	5.0	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Manganese	0.245	J	1.0	0.15	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Potassium	<50		50	18	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Silver	<0.50		0.50	0.13	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Sodium	<100		100	15	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/06/19 17:27	12/11/19 03:44	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/06/19 17:27	12/11/19 03:44	1

Lab Sample ID: LCS 500-519275/2-A
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519275
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	51.2		mg/Kg		102	80 - 120
Arsenic	10.0	8.72		mg/Kg		87	80 - 120
Barium	200	203		mg/Kg		101	80 - 120
Beryllium	5.00	4.82		mg/Kg		96	80 - 120
Boron	100	87.1		mg/Kg		87	80 - 120
Cadmium	5.00	4.71		mg/Kg		94	80 - 120
Calcium	1000	871		mg/Kg		87	80 - 120
Chromium	20.0	19.2		mg/Kg		96	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	25.0	26.2		mg/Kg		105	80 - 120
Iron	100	113		mg/Kg		113	80 - 120
Lead	10.0	8.99		mg/Kg		90	80 - 120
Magnesium	1000	976		mg/Kg		98	80 - 120
Manganese	50.0	47.3		mg/Kg		95	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-519275/2-A
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Nickel	50.0	48.7		mg/Kg		97	80 - 120
Potassium	1000	1040		mg/Kg		104	80 - 120
Selenium	10.0	8.73		mg/Kg		87	80 - 120
Silver	5.00	4.44		mg/Kg		89	80 - 120
Sodium	1000	1070		mg/Kg		107	80 - 120
Thallium	10.0	8.49		mg/Kg		85	80 - 120
Vanadium	50.0	47.2		mg/Kg		94	80 - 120
Zinc	50.0	47.0		mg/Kg		94	80 - 120

Lab Sample ID: 500-174357-1 MS
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: 2615V2-AI-B18 (0-6)
Prep Type: Total/NA
Prep Batch: 519275

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.68	J F1	30.3	5.40	F1	mg/Kg	☼	16	75 - 125
Arsenic	7.0	F1	6.06	10.4	F1	mg/Kg	☼	57	75 - 125
Barium	53		121	175		mg/Kg	☼	101	75 - 125
Beryllium	0.78		3.03	3.80		mg/Kg	☼	99	75 - 125
Boron	17		60.6	69.6		mg/Kg	☼	87	75 - 125
Cadmium	0.15	B	3.03	2.65		mg/Kg	☼	83	75 - 125
Calcium	31000	B	606	28000	4	mg/Kg	☼	-514	75 - 125
Chromium	18		12.1	32.3		mg/Kg	☼	116	75 - 125
Cobalt	15		30.3	45.2		mg/Kg	☼	99	75 - 125
Copper	31	B	15.1	48.1		mg/Kg	☼	114	75 - 125
Iron	21000	B	60.6	21600	4	mg/Kg	☼	411	75 - 125
Lead	17	F1	6.06	19.1	F1	mg/Kg	☼	37	75 - 125
Magnesium	20000		606	19300	4	mg/Kg	☼	-38	75 - 125
Manganese	310	B	30.3	343	4	mg/Kg	☼	106	75 - 125
Nickel	41		30.3	71.2		mg/Kg	☼	100	75 - 125
Potassium	3800		606	7220	4	mg/Kg	☼	567	75 - 125
Selenium	0.75	F1	6.06	4.62	F1	mg/Kg	☼	64	75 - 125
Silver	2.5		3.03	5.73		mg/Kg	☼	106	75 - 125
Sodium	1600		606	2270		mg/Kg	☼	112	75 - 125
Thallium	1.1	F1	6.06	5.22	F1	mg/Kg	☼	67	75 - 125
Vanadium	20		30.3	51.0		mg/Kg	☼	102	75 - 125
Zinc	51		30.3	85.1		mg/Kg	☼	111	75 - 125

Lab Sample ID: 500-174357-1 MSD
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: 2615V2-AI-B18 (0-6)
Prep Type: Total/NA
Prep Batch: 519275

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.68	J F1	31.7	5.16	F1	mg/Kg	☼	14	75 - 125	5	20
Arsenic	7.0	F1	6.35	12.5		mg/Kg	☼	86	75 - 125	18	20
Barium	53		127	184		mg/Kg	☼	103	75 - 125	5	20
Beryllium	0.78		3.17	3.82		mg/Kg	☼	96	75 - 125	1	20
Boron	17		63.5	71.4		mg/Kg	☼	86	75 - 125	3	20
Cadmium	0.15	B	3.17	2.84		mg/Kg	☼	85	75 - 125	7	20
Calcium	31000	B	635	30700	4	mg/Kg	☼	-65	75 - 125	9	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174357-1 MSD
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: 2615V2-AI-B18 (0-6)
Prep Type: Total/NA
Prep Batch: 519275

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Chromium	18		12.7	32.0		mg/Kg	☼	108	75 - 125	1	20
Cobalt	15		31.7	48.7		mg/Kg	☼	105	75 - 125	7	20
Copper	31	B	15.9	50.6		mg/Kg	☼	125	75 - 125	5	20
Iron	21000	B	63.5	22100	4	mg/Kg	☼	1064	75 - 125	2	20
Lead	17	F1	6.35	21.3	F1	mg/Kg	☼	71	75 - 125	11	20
Magnesium	20000		635	20700	4	mg/Kg	☼	172	75 - 125	7	20
Manganese	310	B	31.7	359	4	mg/Kg	☼	151	75 - 125	4	20
Nickel	41		31.7	74.3		mg/Kg	☼	105	75 - 125	4	20
Potassium	3800		635	7040	4	mg/Kg	☼	512	75 - 125	3	20
Selenium	0.75	F1	6.35	5.13	F1	mg/Kg	☼	69	75 - 125	10	20
Silver	2.5		3.17	5.61		mg/Kg	☼	97	75 - 125	2	20
Sodium	1600		635	2250		mg/Kg	☼	103	75 - 125	1	20
Thallium	1.1	F1	6.35	5.54	F1	mg/Kg	☼	69	75 - 125	6	20
Vanadium	20		31.7	52.5		mg/Kg	☼	102	75 - 125	3	20
Zinc	51		31.7	87.6		mg/Kg	☼	114	75 - 125	3	20

Lab Sample ID: 500-174357-1 DU
Matrix: Solid
Analysis Batch: 519906

Client Sample ID: 2615V2-AI-B18 (0-6)
Prep Type: Total/NA
Prep Batch: 519275

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	0.68	J F1	0.301	J F5	mg/Kg	☼	78	20
Arsenic	7.0	F1	7.70		mg/Kg	☼	10	20
Barium	53		59.0		mg/Kg	☼	11	20
Beryllium	0.78		0.857		mg/Kg	☼	9	20
Boron	17		20.1		mg/Kg	☼	16	20
Cadmium	0.15	B	0.0965	J F5	mg/Kg	☼	41	20
Calcium	31000	B	25600		mg/Kg	☼	19	20
Chromium	18		20.2		mg/Kg	☼	10	20
Cobalt	15		16.9		mg/Kg	☼	10	20
Copper	31	B	31.0		mg/Kg	☼	0.8	20
Iron	21000	B	23000		mg/Kg	☼	7	20
Lead	17	F1	15.4		mg/Kg	☼	9	20
Magnesium	20000		16900		mg/Kg	☼	15	20
Manganese	310	B	303		mg/Kg	☼	3	20
Nickel	41		45.4		mg/Kg	☼	10	20
Potassium	3800		4460		mg/Kg	☼	16	20
Selenium	0.75	F1	0.488	J F5	mg/Kg	☼	42	20
Silver	2.5		2.69		mg/Kg	☼	6	20
Sodium	1600		1670		mg/Kg	☼	5	20
Thallium	1.1	F1	1.09		mg/Kg	☼	5	20
Vanadium	20		22.3		mg/Kg	☼	11	20
Zinc	51		54.6		mg/Kg	☼	6	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-519341/2-A
Matrix: Solid
Analysis Batch: 519905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519341
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.500		mg/L		100	80 - 120

Lab Sample ID: LB 500-518975/1-B
Matrix: Solid
Analysis Batch: 519680

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519241

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		12/06/19 15:40	12/10/19 02:12	1
Barium	<0.50		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:40	12/10/19 02:12	1
Boron	<0.50		0.50	0.050	mg/L		12/06/19 15:40	12/10/19 02:12	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:40	12/10/19 02:12	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:12	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:12	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:40	12/10/19 02:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:40	12/10/19 02:12	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:12	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:12	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:40	12/10/19 02:12	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:40	12/10/19 02:12	1
Zinc	0.101	J	0.50	0.020	mg/L		12/06/19 15:40	12/10/19 02:12	1

Lab Sample ID: 500-174357-20 MS
Matrix: Solid
Analysis Batch: 519680

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: TCLP
Prep Batch: 519241
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	<0.050		0.100	0.117		mg/L		117	75 - 125
Barium	0.67		0.500	1.14		mg/L		94	75 - 125
Beryllium	<0.0040		0.0500	0.0470		mg/L		94	75 - 125
Boron	0.091	J	1.00	1.02		mg/L		93	75 - 125
Cadmium	<0.0050		0.0500	0.0532		mg/L		106	75 - 125
Chromium	<0.025		0.200	0.179		mg/L		89	75 - 125
Cobalt	0.011	J	0.500	0.516		mg/L		101	75 - 125
Iron	<0.40		1.00	0.936		mg/L		94	75 - 125
Lead	<0.0075		0.100	0.0999		mg/L		100	75 - 125
Manganese	1.8		0.500	2.33		mg/L		99	75 - 125
Nickel	0.031		0.500	0.541		mg/L		102	75 - 125
Selenium	<0.050		0.100	0.105		mg/L		105	75 - 125
Silver	<0.025		0.0500	0.0561		mg/L		112	75 - 125
Zinc	<0.50	*	0.500	0.532		mg/L		106	75 - 125

Lab Sample ID: 500-174357-20 DU
Matrix: Solid
Analysis Batch: 519680

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: TCLP
Prep Batch: 519241

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	<0.050		<0.050		mg/L		NC	20
Barium	0.67		0.663		mg/L		2	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174357-20 DU
Matrix: Solid
Analysis Batch: 519680

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: TCLP
Prep Batch: 519241

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.091	J	0.0944	J	mg/L		3	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.011	J	0.0107	J	mg/L		0.2	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.92		mg/L		5	20
Nickel	0.031		0.0324		mg/L		4	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	<0.50	*	<0.50	*	mg/L		NC	20

Lab Sample ID: LB 500-519190/1-B
Matrix: Solid
Analysis Batch: 519905

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 519341

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.025		0.025	0.010	mg/L		12/07/19 21:30	12/10/19 19:20	1

Lab Sample ID: 500-174357-20 MS
Matrix: Solid
Analysis Batch: 519905

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: SPLP East
Prep Batch: 519341

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Manganese	0.13		0.500	0.700		mg/L		113	75 - 125	

Lab Sample ID: 500-174357-20 DU
Matrix: Solid
Analysis Batch: 519905

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: SPLP East
Prep Batch: 519341

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Manganese	0.13		0.135		mg/L		0.9	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-519241/2-A
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519241

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Antimony	0.500	0.534		mg/L		107	80 - 120	
Thallium	0.100	0.0981		mg/L		98	80 - 120	

Lab Sample ID: LB 500-518975/1-B
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519241

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:40	12/09/19 18:46	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LB 500-518975/1-B
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519241

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:40	12/09/19 18:46	1

Lab Sample ID: 500-174357-20 MS
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: TCLP
Prep Batch: 519241

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.485		mg/L		97	75 - 125
Thallium	<0.0020		0.100	0.0950		mg/L		95	75 - 125

Lab Sample ID: 500-174357-20 DU
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: 2615V2-AI-B14 (24-30)
Prep Type: TCLP
Prep Batch: 519241

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-519534/12-A
Matrix: Solid
Analysis Batch: 519778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519534

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:33	1

Lab Sample ID: LCS 500-519534/13-A
Matrix: Solid
Analysis Batch: 519778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00197		mg/L		99	80 - 120

Lab Sample ID: LB 500-518975/1-E
Matrix: Solid
Analysis Batch: 519778

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519534

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/19 10:50	12/10/19 08:36	1

Lab Sample ID: 500-174357-10 MS
Matrix: Solid
Analysis Batch: 519778

Client Sample ID: 2615V2-AI-B24 (24-30)
Prep Type: TCLP
Prep Batch: 519534

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00121		mg/L		121	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-174357-10 DU
Matrix: Solid
Analysis Batch: 519778

Client Sample ID: 2615V2-AI-B24 (24-30)
Prep Type: TCLP
Prep Batch: 519534

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-519740/12-A
Matrix: Solid
Analysis Batch: 520006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/10/19 13:20	12/11/19 07:30	1

Lab Sample ID: LCS 500-519740/13-A
Matrix: Solid
Analysis Batch: 520006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519740
%Rec. Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.167		mg/Kg		100	80 - 120

Lab Sample ID: 500-174357-10 MS
Matrix: Solid
Analysis Batch: 520006

Client Sample ID: 2615V2-AI-B24 (24-30)
Prep Type: Total/NA
Prep Batch: 519740
%Rec. Limits

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.022		0.0984	0.116		mg/Kg	☼	95	75 - 125

Lab Sample ID: 500-174357-10 MSD
Matrix: Solid
Analysis Batch: 520006

Client Sample ID: 2615V2-AI-B24 (24-30)
Prep Type: Total/NA
Prep Batch: 519740
%Rec. RPD Limit

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.022		0.0982	0.106		mg/Kg	☼	85	75 - 125	9	20

Lab Sample ID: 500-174357-10 DU
Matrix: Solid
Analysis Batch: 520006

Client Sample ID: 2615V2-AI-B24 (24-30)
Prep Type: Total/NA
Prep Batch: 519740

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.022		0.0243		mg/Kg	☼	9	20

Method: 7.3.4 - Reactive Sulfide

Lab Sample ID: MB 500-519622/1-A
Matrix: Solid
Analysis Batch: 519646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<50		50	3.9	mg/Kg		12/09/19 18:01	12/09/19 19:25	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 7.3.4 - Reactive Sulfide (Continued)

Lab Sample ID: LCS 500-519622/2-A
Matrix: Solid
Analysis Batch: 519646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519622
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sulfide, Reactive	181	153		mg/Kg		84	80 - 120

Lab Sample ID: 500-174357-16 MS
Matrix: Solid
Analysis Batch: 519646

Client Sample ID: 2615V2-AI-B14 (0-6)
Prep Type: Total/NA
Prep Batch: 519622
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sulfide, Reactive	<49	F1	167	101	F1	mg/Kg		61	75 - 125

Lab Sample ID: 500-174357-16 MSD
Matrix: Solid
Analysis Batch: 519646

Client Sample ID: 2615V2-AI-B14 (0-6)
Prep Type: Total/NA
Prep Batch: 519622
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfide, Reactive	<49	F1	181	118	F1	mg/Kg		65	75 - 125	15	20

Method: 9014 - Reactive Cyanide

Lab Sample ID: MB 500-519148/1-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<0.50		0.50	0.50	mg/Kg		12/06/19 10:45	12/06/19 13:21	1

Lab Sample ID: HLCS 500-519148/2-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519148
%Rec.

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	20.0	19.6		mg/Kg		98	90 - 110

Lab Sample ID: LCS 500-519148/3-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519148
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	5.00	5.16		mg/Kg		103	80 - 120

Lab Sample ID: LLCS 500-519148/4-A
Matrix: Solid
Analysis Batch: 519223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519148
%Rec.

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Reactive	2.00	1.60		mg/Kg		80	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Method: 9045D - pH

Lab Sample ID: 500-174357-12 DU
 Matrix: Solid
 Analysis Batch: 518584

Client Sample ID: 2615V2-AI-B17 (6-12)
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.2		8.2		SU		0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Date Collected: 12/02/19 09:30

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 19:40	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:21	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 18:53	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:44	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584	(Start) 12/04/19 13:04 (End) 12/04/19 13:11	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B18 (0-6)

Lab Sample ID: 500-174357-1

Date Collected: 12/02/19 09:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 02:25	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520210	12/12/19 13:34	NRJ	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 03:53	EEN	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:34	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 19:44	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:25	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 18:56	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:46	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 13:11		
					(End)	12/04/19 13:18		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B18 (6-12)

Lab Sample ID: 500-174357-2

Date Collected: 12/02/19 09:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 02:50	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 14:33	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:13	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:17	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:36	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Date Collected: 12/02/19 09:50

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 19:48	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:38	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:00	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:48	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 13:18		
					(End)	12/04/19 13:26		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (12-18)

Lab Sample ID: 500-174357-3

Date Collected: 12/02/19 09:50

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 03:16	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 14:56	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:29	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:21	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:39	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 19:52	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:42	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:03	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:49	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584	(Start) 12/04/19 13:26 (End) 12/04/19 13:33	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 03:41	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 15:19	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:33	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B18 (18-24)

Lab Sample ID: 500-174357-4

Date Collected: 12/02/19 10:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:26	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:41	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 19:56	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:47	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:07	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:51	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 13:33		
					(End)	12/04/19 13:40		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B18 (24-30)

Lab Sample ID: 500-174357-5

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 04:06	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 15:42	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:38	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:30	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:43	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Date Collected: 12/02/19 11:00

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:51	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:10	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 13:40		
					(End)	12/04/19 13:48		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B24 (0-6)

Lab Sample ID: 500-174357-6

Date Collected: 12/02/19 11:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 04:31	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		5	520461	12/13/19 18:57	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:42	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		2	520144	12/12/19 01:27	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:34	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:45	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 02:55	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:14	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:54	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B24 (6-12)

Lab Sample ID: 500-174357-7

Date Collected: 12/02/19 11:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519702	12/10/19 12:09	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		5	520461	12/13/19 19:21	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:46	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		2	520144	12/12/19 01:31	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:39	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:47	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Date Collected: 12/02/19 11:20

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:00	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:17	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:56	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 13:55		
					(End)	12/04/19 14:02		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (12-18)

Lab Sample ID: 500-174357-8

Date Collected: 12/02/19 11:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 05:21	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		5	520461	12/13/19 19:45	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:50	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		2	520144	12/12/19 01:35	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:43	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:53	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:12	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:04	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:27	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 08:57	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584	(Start) 12/04/19 14:10 (End) 12/04/19 14:17	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 05:47	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 16:04	AJD	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B24 (18-24)

Lab Sample ID: 500-174357-9

Date Collected: 12/02/19 11:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:54	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:47	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:56	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Date Collected: 12/02/19 11:40

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:16	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:09	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:31	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:02	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 14:17		
					(End)	12/04/19 14:24		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B24 (24-30)

Lab Sample ID: 500-174357-10

Date Collected: 12/02/19 11:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 06:12	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 16:27	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 04:58	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:51	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 07:58	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B17 (0-6)

Lab Sample ID: 500-174357-11

Date Collected: 12/02/19 12:45

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:32	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:13	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:34	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:07	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584	(Start) 12/04/19 14:24 (End) 12/04/19 14:32	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B17 (0-6)

Lab Sample ID: 500-174357-11

Date Collected: 12/02/19 12:45

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519329	12/02/19 12:45	WRE	TAL CHI
Total/NA	Analysis	8260B		200	520186	12/12/19 15:16	PMF	TAL CHI
Total/NA	Prep	5035	DL		519329	12/02/19 12:45	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	2000	520186	12/12/19 15:40	PMF	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 19:07	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 05:03	EEN	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:06	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B17 (6-12)

Lab Sample ID: 500-174357-12

Date Collected: 12/02/19 12:55

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:36	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:17	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B17 (6-12)

Lab Sample ID: 500-174357-12

Date Collected: 12/02/19 12:55

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:38	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:09	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 14:32		
					(End)	12/04/19 14:39		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B17 (6-12)

Lab Sample ID: 500-174357-12

Date Collected: 12/02/19 12:55

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 06:37	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 16:50	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519906	12/11/19 05:07	EEN	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 12:56	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:08	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B17 (12-18)

Lab Sample ID: 500-174357-13

Date Collected: 12/02/19 13:05

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:40	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:30	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:41	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:11	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B17 (12-18)

Lab Sample ID: 500-174357-13

Date Collected: 12/02/19 13:05

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B17 (12-18)

Lab Sample ID: 500-174357-13

Date Collected: 12/02/19 13:05

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 07:03	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 17:13	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 01:39	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:09	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:10	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B17 (18-24)

Lab Sample ID: 500-174357-14

Date Collected: 12/02/19 13:15

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:44	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:34	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:45	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:13	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 14:54		
					(End)	12/04/19 15:01		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B17 (18-24)

Lab Sample ID: 500-174357-14

Date Collected: 12/02/19 13:15

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519938	12/11/19 13:30	PMF	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 17:36	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 01:43	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:13	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:12	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B17 (24-30)

Lab Sample ID: 500-174357-15

Date Collected: 12/02/19 13:25

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:48	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:39	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:48	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:14	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584	(Start) 12/04/19 15:01 (End) 12/04/19 15:08	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B17 (24-30)

Lab Sample ID: 500-174357-15

Date Collected: 12/02/19 13:25

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 07:53	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 17:59	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 01:47	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B17 (24-30)

Lab Sample ID: 500-174357-15

Date Collected: 12/02/19 13:25

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:17	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:19	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B14 (0-6)

Lab Sample ID: 500-174357-16

Date Collected: 12/02/19 14:00

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			519571	12/09/19 14:10	GCA	TAL CHI
TCLP	Analysis	8260B		20	519841	12/11/19 01:01	EMA	TAL CHI
TCLP	Leach	1311	DL		519571	12/09/19 14:10	GCA	TAL CHI
TCLP	Analysis	8260B	DL	200	519909	12/11/19 15:38	PMF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3510C			519489	12/09/19 08:15	DAK	TAL CHI
TCLP	Analysis	8270D		1	519544	12/09/19 19:40	NRJ	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3510C			519560	12/09/19 13:27	DAK	TAL CHI
TCLP	Analysis	8081B		1	519607	12/10/19 13:49	BJH	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	8151A			519789	12/10/19 11:27	DAK	TAL CHI
TCLP	Analysis	8151		1	519870	12/11/19 09:25	JBK	TAL CHI
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:52	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:43	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:52	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:16	MJG	TAL CHI
Total/NA	Analysis	1010A		1	520887		MS	TAL CHI
					(Start)	12/16/19 16:55		
					(End)	12/16/19 17:42		
Total/NA	Prep	7.3.4			519622	12/09/19 18:01	SJP	TAL CHI
Total/NA	Analysis	7.3.4		1	519646	12/09/19 19:28	SJP	TAL CHI
Total/NA	Prep	9010B			519148	12/06/19 10:45	MS	TAL CHI
Total/NA	Analysis	9014		1	519223	12/06/19 13:26	MS	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 15:08		
					(End)	12/04/19 15:16		

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B14 (0-6)

Lab Sample ID: 500-174357-16

Date Collected: 12/02/19 14:00

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9095A		1	520558		SJP	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B14 (0-6)

Lab Sample ID: 500-174357-16

Date Collected: 12/02/19 14:00

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	DL		519329	12/02/19 14:00	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	5000	520186	12/12/19 14:52	PMF	TAL CHI
Total/NA	Prep	5035			519329	12/02/19 14:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1000	520186	12/12/19 16:05	PMF	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 18:45	AJD	TAL CHI
Total/NA	Prep	3541			519604	12/09/19 16:08	ACK	TAL CHI
Total/NA	Analysis	8082A		1	519618	12/10/19 12:32	BJH	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 01:51	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:21	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B14 (6-12)

Lab Sample ID: 500-174357-17

Date Collected: 12/02/19 14:10

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 20:56	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:47	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:55	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:17	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 15:16		
					(End)	12/04/19 15:23		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B14 (6-12)

Lab Sample ID: 500-174357-17

Date Collected: 12/02/19 14:10

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519634	12/10/19 08:18	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 18:22	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 01:55	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:26	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:23	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B14 (12-18)

Lab Sample ID: 500-174357-18

Date Collected: 12/02/19 14:20

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 21:00	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:52	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 19:59	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584	(Start) 12/04/19 15:30 (End) 12/04/19 15:38	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B14 (12-18)

Lab Sample ID: 500-174357-18

Date Collected: 12/02/19 14:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519702	12/10/19 17:10	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 12:39	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 01:59	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B14 (12-18)

Lab Sample ID: 500-174357-18

Date Collected: 12/02/19 14:20

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:30	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:25	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B14 (18-24)

Lab Sample ID: 500-174357-19

Date Collected: 12/02/19 14:30

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 21:04	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 03:56	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:09	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:28	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 15:38		
					(End)	12/04/19 15:45		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B14 (18-24)

Lab Sample ID: 500-174357-19

Date Collected: 12/02/19 14:30

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519702	12/10/19 17:35	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 13:47	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 02:11	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:34	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:27	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Client Sample ID: 2615V2-AI-B14 (24-30)

Lab Sample ID: 500-174357-20

Date Collected: 12/02/19 14:40

Matrix: Solid

Date Received: 12/02/19 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519190	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519341	12/07/19 21:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	519905	12/10/19 21:08	EEN	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6010B		1	519680	12/10/19 04:01	JEF	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519241	12/06/19 15:40	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:13	FXG	TAL CHI
TCLP	Leach	1311			518975	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519534	12/09/19 10:50	MJG	TAL CHI
TCLP	Analysis	7470A		1	519778	12/10/19 09:29	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518584		MTB	TAL CHI
					(Start)	12/04/19 15:45		
					(End)	12/04/19 15:52		
Total/NA	Analysis	Moisture		1	518681	12/04/19 12:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B14 (24-30)

Lab Sample ID: 500-174357-20

Date Collected: 12/02/19 14:40

Matrix: Solid

Date Received: 12/02/19 15:45

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519360	12/02/19 18:00	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519702	12/10/19 18:01	JDD	TAL CHI
Total/NA	Prep	3541			519914	12/11/19 07:45	DX	TAL CHI
Total/NA	Analysis	8270D		1	520219	12/12/19 14:10	AJD	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520144	12/12/19 02:15	JEF	TAL CHI
Total/NA	Prep	3050B			519275	12/06/19 17:27	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 13:39	JEF	TAL CHI
Total/NA	Prep	7471B			519740	12/10/19 13:20	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520006	12/11/19 08:30	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174357-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1010A		Solid	Flashpoint
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7.3.4	7.3.4	Solid	Sulfide, Reactive
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
9014	9010B	Solid	Cyanide, Reactive
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: D. Tiebout
 Company: _____
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: _____
 Company: _____
 Address: _____
 Address: _____
 Phone: 500-174357 COC
 Fax: _____
 PO#/Reference# _____



Chain of Custody Record

Lab Job #: 500-174357
 Chain of Custody Number: _____
 Page 1 of 2
 Temperature °C of Cooler: 6.8, 7.3, 6.2

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOLCS	SVOCs	Total PCB Metals	pH	Percent Solids	Comments
			Date	Time								
1		2615V2-AI-B18(0-6)	12/2/19	0930	2	S	X	X	X	X	X	
2		2615V2-AI-B18(6-12)	12/2/19	0940	2	S	X	X	X	X	X	
3		2615V2-AI-B18(12-18)	12/2/19	0950	2	S	X	X	X	X	X	
4		2615V2-AI-B18(18-24)	12/2/19	1000	2	S	X	X	X	X	X	
5		2615V2-AI-B18(24-30)	12/2/19	1010	2	S	X	X	X	X	X	
6		2615V2-AI-B24(0-6)	12/2/19	1100	2	S	X	X	X	X	X	
7		2615V2-AI-B24(6-12)	12/2/19	1110	2	S	X	X	X	X	X	
8		2615V2-AI-B24(12-18)	12/2/19	1120	2	S	X	X	X	X	X	
9		2615V2-AI-B24(18-24)	12/2/19	1130	2	S	X	X	X	X	X	
10		2615V2-AI-B24(24-30)	12/2/19	1140	2	S	X	X	X	X	X	

- Preservative Key
- HCL, Cool to 4°
 - H2SO4, Cool to 4°
 - HNO3, Cool to 4°
 - NaOH, Cool to 4°
 - NaOH/Zn, Cool to 4°
 - NaHSO4
 - Cool to 4°
 - None
 - Other

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days 10 Days ___ 15 Days ___ Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Christy Hood</u>	Company <u>E+E</u>	Date <u>12/2/19</u>	Time <u>1450</u>	Received By <u>[Signature]</u>	Company <u>[Signature]</u>	Date <u>12/3/19</u>	Time <u>1450</u>	Lab Courier
Relinquished By <u>[Signature]</u>	Company <u>[Signature]</u>	Date <u>12/2/19</u>	Time <u>1545</u>	Received By <u>[Signature]</u>	Company <u>[Signature]</u>	Date <u>12/2/19</u>	Time <u>1545</u>	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

Matrix Key

WW - Wastewater	SE - Sediment
W - Water	SO - Soil
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking Water
OL - Oil	O - Other
A - Air	

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) _____
Contact: D. Tiebout
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional) _____
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job # 500-AY-357

Chain of Custody Number: _____

Page 2 of 2

Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter										Preservative Key	
E & E		1009341.0447.01														1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #															
Chicago IL																	
Sampler		Lab PM															
A. Happel		R. Wright															
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	Total / TCLP Metals	pH	Percent Solids	Waste Disposal					Comments
			Date	Time													
11		261SV2-AI-B17(0-6)	12/2/19	1245	2	S	X	X	X	X	X						
12		261SV2-AI-B17(6-12)	12/2/19	1255	2	S	X	X	X	X	X						
13		261SV2-AI-B17(12-18)	12/2/19	1305	2	S	X	X	X	X	X						
14		261SV2-AI-B17(18-24)	12/2/19	1315	2	S	X	X	X	X	X						
15		261SV2-AI-B17(24-30)	12/2/19	1325	2	S	X	X	X	X	X						
16		261SV2-AI-B14(0-6)	12/2/19	1400	2	S	X	X	X	X	X	X					
17		261SV2-AI-B14(6-12)	12/2/19	1410	2	S	X	X	X	X	X						
18		261SV2-AI-B14(12-18)	12/2/19	1420	2	S	X	X	X	X	X						
19		261SV2-AI-B14(18-24)	12/2/19	1430	2	S	X	X	X	X	X						
20		261SV2-AI-B14(24-30)	12/2/19	1440	2	S	X	X	X	X	X						

Turnaround Time Required (Business Days) _____
 _____ 1 Day _____ 2 Days _____ 5 Days _____ 7 Days 10 Days _____ 15 Days _____ Other _____
 Requested Due Date _____
 Sample Disposal: Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Christina</u>	Company E & E	Date 12/2/19	Time 1450	Received By <u>[Signature]</u>	Company E & E	Date 12/2/19	Time 1450	Lab Courier
Relinquished By <u>[Signature]</u>	Company E & E	Date 12/2/19	Time 1545	Received By <u>[Signature]</u>	Company E & E	Date 12/2/19	Time 1545	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____
 Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174357-1

Login Number: 174357

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	6.8,7.3,6.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174404-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/17/2019 11:10:15 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Job ID: 500-174404-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174404-1

Receipt

The samples were received on 12/3/2019 1:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 7.0° C and 7.1° C.

GC/MS VOA

Method 8260B: The method blank for 519967 contained Methylene chloride above the method detection limit (MDL) and below the reporting limit (RL). This target analyte was not detected in the samples; therefore, re-analysis of samples were not performed.

Method 8260B: The laboratory control sample (LCS) for 519967 recovered outside control limits for the following analyte: Chloromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with preparation batch 500-520063 and analytical batch 500-520210 had 1 analyte outside control limits: Hexachlorocyclopentadiene. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The method blank for preparation batch 500-518979 and 500-519242 contained iron above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 6010B: The method blank for preparation batch 500-519276 and analytical batch 500-519918 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.024		0.0019	0.00052	mg/Kg	1	☼	8260B	Total/NA
trans-1,2-Dichloroethene	0.0041		0.0019	0.00083	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.20		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J F1 F2	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.9	F1	0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	48	B	0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	13		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	28000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	33	F1	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	22000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	16	B	0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	43		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.75	F1	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	2.2		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.73		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.058	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	3.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.20	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.020		0.015	0.0065	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.11		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	32	B	0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	14		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	15		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	34		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (6-12) (Continued)

Lab Sample ID: 500-174404-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14	B	0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2600		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	45		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.50		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.010	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.094	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.15		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.66	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	42	B	0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	13	B	0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.51	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.9		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.026		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18) (Continued)

Lab Sample ID: 500-174404-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.022		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.13		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.67	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.6		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39	B	0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	15		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	50000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	19		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14	B	0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.8		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.64		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.071	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.028		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.096		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.12	J	0.21	0.075	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.74	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	8.4		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41	B	0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	17		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (18-24) (Continued)

Lab Sample ID: 500-174404-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	20000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	13	B	0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	340	B	0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		30	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.5		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.057		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.021	0.0070	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.12		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.76	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	42	B	0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	16		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14	B	0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320	B	0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2900		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	2.0		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	57		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.089	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.080	J B	0.50	0.020	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (24-30) (Continued)

Lab Sample ID: 500-174404-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.087		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.019	0.0063	mg/Kg	1	*	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174404-1	2615V2-AI-B15 (0-6)	Solid	12/03/19 09:30	12/03/19 13:25	
500-174404-2	2615V2-AI-B15 (6-12)	Solid	12/03/19 09:40	12/03/19 13:25	
500-174404-3	2615V2-AI-B15 (12-18)	Solid	12/03/19 09:50	12/03/19 13:25	
500-174404-4	2615V2-AI-B15 (12-18)D	Solid	12/03/19 10:00	12/03/19 13:25	
500-174404-5	2615V2-AI-B15 (18-24)	Solid	12/03/19 10:10	12/03/19 13:25	
500-174404-6	2615V2-AI-B15 (24-30)	Solid	12/03/19 10:20	12/03/19 13:25	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
cis-1,2-Dichloroethene	0.024		0.0019	0.00052	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
trans-1,2-Dichloroethene	0.0041		0.0019	0.00083	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	12/03/19 17:36	12/10/19 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	12/03/19 17:36	12/10/19 20:07	1
4-Bromofluorobenzene (Surr)	115		75 - 131	12/03/19 17:36	12/10/19 20:07	1
Dibromofluoromethane	87		75 - 126	12/03/19 17:36	12/10/19 20:07	1
Toluene-d8 (Surr)	97		75 - 124	12/03/19 17:36	12/10/19 20:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Hexachlorocyclopentadiene	<0.84 *		0.84	0.24	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Phenanthrene	0.20		0.041	0.0058	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 15:16	12/12/19 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	53		31 - 166	12/11/19 15:16	12/12/19 20:10	1
Phenol-d5	58		30 - 153	12/11/19 15:16	12/12/19 20:10	1
Nitrobenzene-d5	64		37 - 147	12/11/19 15:16	12/12/19 20:10	1
2-Fluorobiphenyl	94		43 - 145	12/11/19 15:16	12/12/19 20:10	1
2,4,6-Tribromophenol	79		31 - 143	12/11/19 15:16	12/12/19 20:10	1
Terphenyl-d14	91		42 - 157	12/11/19 15:16	12/12/19 20:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J F1 F2	1.2	0.23	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Arsenic	7.9	F1	0.59	0.20	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Barium	48	B	0.59	0.067	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Beryllium	0.68		0.24	0.055	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Boron	13		2.9	0.27	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Cadmium	0.18	B	0.12	0.021	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Calcium	28000	B	12	2.0	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Chromium	18		0.59	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Cobalt	15		0.29	0.077	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Copper	33	F1	0.59	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Iron	22000	B	12	6.1	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Lead	16	B	0.29	0.14	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Magnesium	19000		5.9	2.9	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Manganese	310	B	0.59	0.085	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Nickel	43		0.59	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Potassium	2800		29	10	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Selenium	0.75	F1	0.59	0.35	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Silver	2.3		0.29	0.076	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Sodium	1100		59	8.7	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Thallium	2.2		0.59	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Vanadium	18		0.29	0.070	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1
Zinc	51		1.2	0.52	mg/Kg	☼	12/06/19 17:30	12/11/19 04:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.73		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 20:49	1
Boron	0.058	J	0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 20:49	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:49	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:49	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 20:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 20:49	1
Manganese	3.1		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:49	1
Nickel	0.021	J	0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:49	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 20:49	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:49	1
Zinc	0.20	J B	0.50	0.020	mg/L		12/06/19 15:42	12/09/19 20:49	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.0		0.025	0.010	mg/L		12/07/19 21:35	12/11/19 19:42	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 20:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 20:33	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.020	0.0066	mg/Kg	☼	12/11/19 12:45	12/12/19 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/05/19 12:45	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 84.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Acetone	0.020		0.015	0.0065	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Chloromethane	<0.0037 *		0.0037	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	12/03/19 17:36	12/11/19 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	12/03/19 17:36	12/11/19 13:53	1
4-Bromofluorobenzene (Surr)	112		75 - 131	12/03/19 17:36	12/11/19 13:53	1
Dibromofluoromethane	101		75 - 126	12/03/19 17:36	12/11/19 13:53	1
Toluene-d8 (Surr)	94		75 - 124	12/03/19 17:36	12/11/19 13:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Hexachlorocyclopentadiene	<0.77 *		0.77	0.22	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Phenanthrene	0.11		0.038	0.0053	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Benzof[anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/11/19 15:16	12/12/19 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	56		31 - 166				12/11/19 15:16	12/12/19 19:01	1
Phenol-d5	61		30 - 153				12/11/19 15:16	12/12/19 19:01	1
Nitrobenzene-d5	69		37 - 147				12/11/19 15:16	12/12/19 19:01	1
2-Fluorobiphenyl	102		43 - 145				12/11/19 15:16	12/12/19 19:01	1
2,4,6-Tribromophenol	103		31 - 143				12/11/19 15:16	12/12/19 19:01	1
Terphenyl-d14	97		42 - 157				12/11/19 15:16	12/12/19 19:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.1	0.21	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Arsenic	7.8		0.55	0.19	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Barium	32	B	0.55	0.062	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Beryllium	0.58		0.22	0.051	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Boron	14		2.7	0.25	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Cadmium	0.19	B	0.11	0.020	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Calcium	54000	B	110	19	mg/Kg	☼	12/06/19 17:30	12/11/19 14:56	10
Chromium	15		0.55	0.27	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Cobalt	13		0.27	0.072	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Copper	34		0.55	0.15	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Iron	18000	B	11	5.7	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Lead	14	B	0.27	0.13	mg/Kg	☼	12/06/19 17:30	12/11/19 16:24	1
Magnesium	26000		5.5	2.7	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Manganese	360	B	0.55	0.079	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Nickel	35		0.55	0.16	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Potassium	2600		27	9.7	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Silver	1.8		0.27	0.070	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Sodium	180		55	8.1	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Thallium	1.3		0.55	0.27	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Vanadium	16		0.27	0.064	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1
Zinc	45		1.1	0.48	mg/Kg	☼	12/06/19 17:30	12/11/19 05:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 20:54	1
Boron	0.065	J	0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 84.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 20:54	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:54	1
Cobalt	0.010	J	0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:54	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 20:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 20:54	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:54	1
Nickel	0.028		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:54	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 20:54	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:54	1
Zinc	0.094	J B	0.50	0.020	mg/L		12/06/19 15:42	12/09/19 20:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		12/07/19 21:35	12/11/19 19:46	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 20:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 20:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.017	0.0057	mg/Kg	☼	12/11/19 12:45	12/12/19 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/05/19 12:51	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Chloromethane	<0.0044 *		0.0044	0.0018	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 134	12/03/19 17:36	12/11/19 14:18	1
4-Bromofluorobenzene (Surr)	112		75 - 131	12/03/19 17:36	12/11/19 14:18	1
Dibromofluoromethane	99		75 - 126	12/03/19 17:36	12/11/19 14:18	1
Toluene-d8 (Surr)	92		75 - 124	12/03/19 17:36	12/11/19 14:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Phenanthrene	0.15		0.041	0.0058	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/11/19 15:16	12/12/19 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	56		31 - 166	12/11/19 15:16	12/12/19 19:24	1
Phenol-d5	61		30 - 153	12/11/19 15:16	12/12/19 19:24	1
Nitrobenzene-d5	67		37 - 147	12/11/19 15:16	12/12/19 19:24	1
2-Fluorobiphenyl	90		43 - 145	12/11/19 15:16	12/12/19 19:24	1
2,4,6-Tribromophenol	67		31 - 143	12/11/19 15:16	12/12/19 19:24	1
Terphenyl-d14	92		42 - 157	12/11/19 15:16	12/12/19 19:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	J	1.2	0.23	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Arsenic	7.5		0.58	0.20	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Barium	42	B	0.58	0.066	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Beryllium	0.62		0.23	0.054	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Boron	15		2.9	0.27	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Cadmium	0.30	B	0.12	0.021	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Calcium	53000	B	120	20	mg/Kg	☼	12/06/19 17:30	12/11/19 15:00	10
Chromium	17		0.58	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Copper	27		0.58	0.16	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Iron	20000	B	12	6.0	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Lead	13	B	0.29	0.13	mg/Kg	☼	12/06/19 17:30	12/11/19 16:28	1
Magnesium	23000		5.8	2.9	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Manganese	320	B	0.58	0.084	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Nickel	36		0.58	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Potassium	2800		29	10	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Selenium	0.51	J	0.58	0.34	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Silver	2.1		0.29	0.075	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Sodium	180		58	8.6	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Thallium	1.9		0.58	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1
Zinc	55		1.2	0.51	mg/Kg	☼	12/06/19 17:30	12/11/19 05:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 20:58	1
Boron	0.071	J	0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 20:58	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:58	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:58	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 20:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 20:58	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:58	1
Nickel	0.027		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 20:58	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:58	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/19 15:42	12/09/19 20:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.026		0.025	0.010	mg/L		12/07/19 21:35	12/11/19 19:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 20:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 20:40	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.018	0.0061	mg/Kg	☼	12/11/19 12:45	12/12/19 08:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/05/19 12:58	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Chloromethane	<0.0042 *		0.0042	0.0017	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	12/03/19 17:36	12/11/19 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	12/03/19 17:36	12/11/19 14:43	1
4-Bromofluorobenzene (Surr)	117		75 - 131	12/03/19 17:36	12/11/19 14:43	1
Dibromofluoromethane	98		75 - 126	12/03/19 17:36	12/11/19 14:43	1
Toluene-d8 (Surr)	93		75 - 124	12/03/19 17:36	12/11/19 14:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Hexachlorocyclopentadiene	<0.79 *		0.79	0.23	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Phenanthrene	0.13		0.039	0.0055	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 81.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	45		31 - 166				12/11/19 15:16	12/12/19 19:47	1
Phenol-d5	54		30 - 153				12/11/19 15:16	12/12/19 19:47	1
Nitrobenzene-d5	58		37 - 147				12/11/19 15:16	12/12/19 19:47	1
2-Fluorobiphenyl	82		43 - 145				12/11/19 15:16	12/12/19 19:47	1
2,4,6-Tribromophenol	65		31 - 143				12/11/19 15:16	12/12/19 19:47	1
Terphenyl-d14	85		42 - 157				12/11/19 15:16	12/12/19 19:47	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.67	J	1.2	0.23	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Arsenic	7.6		0.59	0.20	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Barium	39	B	0.59	0.067	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Beryllium	0.62		0.23	0.055	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Boron	15		2.9	0.27	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Cadmium	0.25	B	0.12	0.021	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Calcium	50000	B	120	20	mg/Kg	☼	12/06/19 17:30	12/11/19 15:04	10
Chromium	19		0.59	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Cobalt	14		0.29	0.077	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Copper	26		0.59	0.16	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Iron	20000	B	12	6.1	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Lead	14	B	0.29	0.14	mg/Kg	☼	12/06/19 17:30	12/11/19 16:32	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Manganese	320	B	0.59	0.085	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Potassium	2800		29	10	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Selenium	0.48	J	0.59	0.34	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Silver	2.0		0.29	0.076	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Sodium	170		59	8.7	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Thallium	1.8		0.59	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Vanadium	18		0.29	0.069	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1
Zinc	53		1.2	0.51	mg/Kg	☼	12/06/19 17:30	12/11/19 05:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.64		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 21:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 21:02	1
Boron	0.071	J	0.50	0.050	mg/L		12/06/19 15:42	12/09/19 21:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 81.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 21:02	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:02	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:02	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 21:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 21:02	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:02	1
Nickel	0.027		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:02	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 21:02	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:02	1
Zinc	<0.50		0.50	0.020	mg/L		12/06/19 15:42	12/09/19 21:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.028		0.025	0.010	mg/L		12/07/19 21:35	12/11/19 19:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 20:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 20:54	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.019	0.0063	mg/Kg	☼	12/11/19 12:45	12/12/19 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/05/19 13:05	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Chloromethane	<0.0047 *		0.0047	0.0019	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	12/03/19 17:36	12/11/19 15:09	1
4-Bromofluorobenzene (Surr)	110		75 - 131	12/03/19 17:36	12/11/19 15:09	1
Dibromofluoromethane	96		75 - 126	12/03/19 17:36	12/11/19 15:09	1
Toluene-d8 (Surr)	95		75 - 124	12/03/19 17:36	12/11/19 15:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Hexachlorocyclopentadiene	<0.83	*	0.83	0.24	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Phenanthrene	0.096		0.041	0.0057	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Pyrene	<0.041		0.041	0.0082	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Bis(2-ethylhexyl) phthalate	0.12	J	0.21	0.075	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/11/19 15:16	12/12/19 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	47		31 - 166				12/11/19 15:16	12/12/19 16:22	1
Phenol-d5	54		30 - 153				12/11/19 15:16	12/12/19 16:22	1
Nitrobenzene-d5	64		37 - 147				12/11/19 15:16	12/12/19 16:22	1
2-Fluorobiphenyl	84		43 - 145				12/11/19 15:16	12/12/19 16:22	1
2,4,6-Tribromophenol	71		31 - 143				12/11/19 15:16	12/12/19 16:22	1
Terphenyl-d14	82		42 - 157				12/11/19 15:16	12/12/19 16:22	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.2	0.23	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Arsenic	8.4		0.60	0.21	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Barium	41	B	0.60	0.068	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Beryllium	0.67		0.24	0.056	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Boron	17		3.0	0.28	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Cadmium	0.24	B	0.12	0.022	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Calcium	54000	B	120	20	mg/Kg	☼	12/06/19 17:30	12/11/19 15:09	10
Chromium	18		0.60	0.30	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Cobalt	15		0.30	0.079	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Copper	26		0.60	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Iron	20000	B	12	6.2	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Lead	13	B	0.30	0.14	mg/Kg	☼	12/06/19 17:30	12/11/19 16:36	1
Magnesium	23000		6.0	3.0	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Manganese	340	B	0.60	0.087	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Nickel	37		0.60	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Potassium	3100		30	11	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Silver	2.2		0.30	0.077	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Sodium	180		60	8.9	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Thallium	1.5		0.60	0.30	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Vanadium	19		0.30	0.071	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1
Zinc	59		1.2	0.53	mg/Kg	☼	12/06/19 17:30	12/11/19 05:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 21:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 21:19	1
Boron	0.082	J	0.50	0.050	mg/L		12/06/19 15:42	12/09/19 21:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 21:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:19	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 21:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 21:19	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:19	1
Nickel	0.022	J	0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 21:19	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:19	1
Zinc	0.16	J B	0.50	0.020	mg/L		12/06/19 15:42	12/09/19 21:19	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.057		0.025	0.010	mg/L		12/07/19 21:35	12/11/19 19:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 20:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 20:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.021	0.0070	mg/Kg	☼	12/11/19 12:45	12/12/19 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/05/19 13:19	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Chloromethane	<0.0043 *		0.0043	0.0017	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/03/19 17:36	12/11/19 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 134	12/03/19 17:36	12/11/19 15:34	1
4-Bromofluorobenzene (Surr)	114		75 - 131	12/03/19 17:36	12/11/19 15:34	1
Dibromofluoromethane	99		75 - 126	12/03/19 17:36	12/11/19 15:34	1
Toluene-d8 (Surr)	92		75 - 124	12/03/19 17:36	12/11/19 15:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Hexachlorocyclopentadiene	<0.82 *		0.82	0.23	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Phenanthrene	0.12		0.040	0.0057	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/11/19 15:16	12/12/19 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	55		31 - 166				12/11/19 15:16	12/12/19 16:44	1
Phenol-d5	51		30 - 153				12/11/19 15:16	12/12/19 16:44	1
Nitrobenzene-d5	80		37 - 147				12/11/19 15:16	12/12/19 16:44	1
2-Fluorobiphenyl	100		43 - 145				12/11/19 15:16	12/12/19 16:44	1
2,4,6-Tribromophenol	66		31 - 143				12/11/19 15:16	12/12/19 16:44	1
Terphenyl-d14	100		42 - 157				12/11/19 15:16	12/12/19 16:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J	1.2	0.23	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Arsenic	7.5		0.59	0.20	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Barium	42	B	0.59	0.068	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Beryllium	0.66		0.24	0.056	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Boron	16		3.0	0.28	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Cadmium	0.22	B	0.12	0.021	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Calcium	54000	B	120	20	mg/Kg	☼	12/06/19 17:30	12/11/19 15:13	10
Chromium	17		0.59	0.29	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Copper	29		0.59	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Iron	20000	B	12	6.2	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Lead	14	B	0.30	0.14	mg/Kg	☼	12/06/19 17:30	12/11/19 16:40	1
Magnesium	23000		5.9	2.9	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Manganese	320	B	0.59	0.086	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Potassium	2900		30	11	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Selenium	0.47	J	0.59	0.35	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Silver	2.1		0.30	0.077	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Sodium	190		59	8.8	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Thallium	2.0		0.59	0.30	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Vanadium	19		0.30	0.070	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1
Zinc	57		1.2	0.52	mg/Kg	☼	12/06/19 17:30	12/11/19 05:49	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 21:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 21:23	1
Boron	0.089	J	0.50	0.050	mg/L		12/06/19 15:42	12/09/19 21:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 21:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:23	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:23	1
Iron	<0.40		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 21:23	1
Manganese	1.8		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:23	1
Nickel	0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:23	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 21:23	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 21:23	1
Zinc	0.080	J B	0.50	0.020	mg/L		12/06/19 15:42	12/09/19 21:23	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.087		0.025	0.010	mg/L		12/07/19 21:35	12/11/19 20:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 21:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 21:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0063	mg/Kg	☼	12/11/19 12:45	12/12/19 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/05/19 13:33	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

GC/MS VOA

Prep Batch: 519655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	5035	
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	5035	
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	5035	
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	5035	
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	5035	
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	5035	
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	5035	
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	5035	
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	5035	
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	5035	
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	5035	

Analysis Batch: 519702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	8260B	519655
MB 500-519702/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-519702/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-519702/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 519967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	8260B	519655
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	8260B	519655
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	8260B	519655
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	8260B	519655
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	8260B	519655
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	8260B	519655
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	8260B	519655
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	8260B	519655
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	8260B	519655
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	8260B	519655
MB 500-519967/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-519967/25	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 520063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	3541	
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	3541	
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	3541	
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	3541	
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	3541	
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	3541	
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	3541	
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	3541	
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	3541	
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	3541	
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	3541	
MB 500-520063/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-520063/2-A	Lab Control Sample	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

GC/MS Semi VOA

Analysis Batch: 520210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-520063/1-A	Method Blank	Total/NA	Solid	8270D	520063
LCS 500-520063/2-A	Lab Control Sample	Total/NA	Solid	8270D	520063

Analysis Batch: 520289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	8270D	520063
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	8270D	520063
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	8270D	520063
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	8270D	520063
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	8270D	520063
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	8270D	520063
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	8270D	520063
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	8270D	520063
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	8270D	520063
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	8270D	520063
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	8270D	520063

Metals

Leach Batch: 518979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	TCLP	Solid	1311	
500-174404-2	2615V2-AI-B15 (6-12)	TCLP	Solid	1311	
500-174404-3	2615V2-AI-B15 (12-18)	TCLP	Solid	1311	
500-174404-4	2615V2-AI-B15 (12-18)D	TCLP	Solid	1311	
500-174404-5	2615V2-AI-B15 (18-24)	TCLP	Solid	1311	
500-174404-6	2615V2-AI-B15 (24-30)	TCLP	Solid	1311	
500-174404-7	2615V2-AI-B07 (0-6)	TCLP	Solid	1311	
500-174404-8	2615V2-AI-B07 (6-12)	TCLP	Solid	1311	
500-174404-9	2615V2-AI-B07 (12-18)	TCLP	Solid	1311	
500-174404-10	2615V2-AI-B07 (18-24)	TCLP	Solid	1311	
500-174404-11	2615V2-AI-B07 (24-30)	TCLP	Solid	1311	
LB 500-518979/1-B	Method Blank	TCLP	Solid	1311	
LB 500-518979/1-C	Method Blank	TCLP	Solid	1311	
500-174404-10 MS	2615V2-AI-B07 (18-24)	TCLP	Solid	1311	
500-174404-11 MS	2615V2-AI-B07 (24-30)	TCLP	Solid	1311	
500-174404-10 DU	2615V2-AI-B07 (18-24)	TCLP	Solid	1311	
500-174404-11 DU	2615V2-AI-B07 (24-30)	TCLP	Solid	1311	

Leach Batch: 519191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	SPLP East	Solid	1312	
500-174404-2	2615V2-AI-B15 (6-12)	SPLP East	Solid	1312	
500-174404-3	2615V2-AI-B15 (12-18)	SPLP East	Solid	1312	
500-174404-4	2615V2-AI-B15 (12-18)D	SPLP East	Solid	1312	
500-174404-5	2615V2-AI-B15 (18-24)	SPLP East	Solid	1312	
500-174404-6	2615V2-AI-B15 (24-30)	SPLP East	Solid	1312	
500-174404-7	2615V2-AI-B07 (0-6)	SPLP East	Solid	1312	
500-174404-8	2615V2-AI-B07 (6-12)	SPLP East	Solid	1312	
500-174404-9	2615V2-AI-B07 (12-18)	SPLP East	Solid	1312	
500-174404-10	2615V2-AI-B07 (18-24)	SPLP East	Solid	1312	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Metals (Continued)

Leach Batch: 519191 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-11	2615V2-AI-B07 (24-30)	SPLP East	Solid	1312	
LB 500-519191/1-B	Method Blank	SPLP East	Solid	1312	

Prep Batch: 519242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	TCLP	Solid	3010A	518979
500-174404-2	2615V2-AI-B15 (6-12)	TCLP	Solid	3010A	518979
500-174404-3	2615V2-AI-B15 (12-18)	TCLP	Solid	3010A	518979
500-174404-4	2615V2-AI-B15 (12-18)D	TCLP	Solid	3010A	518979
500-174404-5	2615V2-AI-B15 (18-24)	TCLP	Solid	3010A	518979
500-174404-6	2615V2-AI-B15 (24-30)	TCLP	Solid	3010A	518979
500-174404-7	2615V2-AI-B07 (0-6)	TCLP	Solid	3010A	518979
500-174404-8	2615V2-AI-B07 (6-12)	TCLP	Solid	3010A	518979
500-174404-9	2615V2-AI-B07 (12-18)	TCLP	Solid	3010A	518979
500-174404-10	2615V2-AI-B07 (18-24)	TCLP	Solid	3010A	518979
500-174404-11	2615V2-AI-B07 (24-30)	TCLP	Solid	3010A	518979
LB 500-518979/1-B	Method Blank	TCLP	Solid	3010A	518979
LCS 500-519242/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174404-11 MS	2615V2-AI-B07 (24-30)	TCLP	Solid	3010A	518979
500-174404-11 DU	2615V2-AI-B07 (24-30)	TCLP	Solid	3010A	518979

Prep Batch: 519276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	3050B	
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	3050B	
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	3050B	
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	3050B	
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	3050B	
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	3050B	
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	3050B	
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	3050B	
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	3050B	
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	3050B	
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	3050B	
MB 500-519276/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-519276/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-174404-1 MS	2615V2-AI-B15 (0-6)	Total/NA	Solid	3050B	
500-174404-1 MSD	2615V2-AI-B15 (0-6)	Total/NA	Solid	3050B	
500-174404-1 DU	2615V2-AI-B15 (0-6)	Total/NA	Solid	3050B	

Prep Batch: 519342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	SPLP East	Solid	3010A	519191
500-174404-2	2615V2-AI-B15 (6-12)	SPLP East	Solid	3010A	519191
500-174404-3	2615V2-AI-B15 (12-18)	SPLP East	Solid	3010A	519191
500-174404-4	2615V2-AI-B15 (12-18)D	SPLP East	Solid	3010A	519191
500-174404-5	2615V2-AI-B15 (18-24)	SPLP East	Solid	3010A	519191
500-174404-6	2615V2-AI-B15 (24-30)	SPLP East	Solid	3010A	519191
500-174404-7	2615V2-AI-B07 (0-6)	SPLP East	Solid	3010A	519191
500-174404-8	2615V2-AI-B07 (6-12)	SPLP East	Solid	3010A	519191
500-174404-9	2615V2-AI-B07 (12-18)	SPLP East	Solid	3010A	519191

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Metals (Continued)

Prep Batch: 519342 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-10	2615V2-AI-B07 (18-24)	SPLP East	Solid	3010A	519191
500-174404-11	2615V2-AI-B07 (24-30)	SPLP East	Solid	3010A	519191
LB 500-519191/1-B	Method Blank	SPLP East	Solid	3010A	519191
LCS 500-519342/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 519679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	TCLP	Solid	6010B	519242
500-174404-2	2615V2-AI-B15 (6-12)	TCLP	Solid	6010B	519242
500-174404-3	2615V2-AI-B15 (12-18)	TCLP	Solid	6010B	519242
500-174404-4	2615V2-AI-B15 (12-18)D	TCLP	Solid	6010B	519242
500-174404-5	2615V2-AI-B15 (18-24)	TCLP	Solid	6010B	519242
500-174404-6	2615V2-AI-B15 (24-30)	TCLP	Solid	6010B	519242
500-174404-7	2615V2-AI-B07 (0-6)	TCLP	Solid	6010B	519242
500-174404-8	2615V2-AI-B07 (6-12)	TCLP	Solid	6010B	519242
500-174404-9	2615V2-AI-B07 (12-18)	TCLP	Solid	6010B	519242
500-174404-10	2615V2-AI-B07 (18-24)	TCLP	Solid	6010B	519242
500-174404-11	2615V2-AI-B07 (24-30)	TCLP	Solid	6010B	519242
LB 500-518979/1-B	Method Blank	TCLP	Solid	6010B	519242
LCS 500-519242/2-A	Lab Control Sample	Total/NA	Solid	6010B	519242
500-174404-11 MS	2615V2-AI-B07 (24-30)	TCLP	Solid	6010B	519242
500-174404-11 DU	2615V2-AI-B07 (24-30)	TCLP	Solid	6010B	519242

Analysis Batch: 519765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	TCLP	Solid	6020A	519242
500-174404-2	2615V2-AI-B15 (6-12)	TCLP	Solid	6020A	519242
500-174404-3	2615V2-AI-B15 (12-18)	TCLP	Solid	6020A	519242
500-174404-4	2615V2-AI-B15 (12-18)D	TCLP	Solid	6020A	519242
500-174404-5	2615V2-AI-B15 (18-24)	TCLP	Solid	6020A	519242
500-174404-6	2615V2-AI-B15 (24-30)	TCLP	Solid	6020A	519242
500-174404-7	2615V2-AI-B07 (0-6)	TCLP	Solid	6020A	519242
500-174404-8	2615V2-AI-B07 (6-12)	TCLP	Solid	6020A	519242
500-174404-9	2615V2-AI-B07 (12-18)	TCLP	Solid	6020A	519242
500-174404-10	2615V2-AI-B07 (18-24)	TCLP	Solid	6020A	519242
500-174404-11	2615V2-AI-B07 (24-30)	TCLP	Solid	6020A	519242
LB 500-518979/1-B	Method Blank	TCLP	Solid	6020A	519242
LCS 500-519242/2-A	Lab Control Sample	Total/NA	Solid	6020A	519242
500-174404-11 MS	2615V2-AI-B07 (24-30)	TCLP	Solid	6020A	519242
500-174404-11 DU	2615V2-AI-B07 (24-30)	TCLP	Solid	6020A	519242

Prep Batch: 519855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	TCLP	Solid	7470A	518979
500-174404-2	2615V2-AI-B15 (6-12)	TCLP	Solid	7470A	518979
500-174404-3	2615V2-AI-B15 (12-18)	TCLP	Solid	7470A	518979
500-174404-4	2615V2-AI-B15 (12-18)D	TCLP	Solid	7470A	518979
500-174404-5	2615V2-AI-B15 (18-24)	TCLP	Solid	7470A	518979
500-174404-6	2615V2-AI-B15 (24-30)	TCLP	Solid	7470A	518979
500-174404-7	2615V2-AI-B07 (0-6)	TCLP	Solid	7470A	518979
500-174404-8	2615V2-AI-B07 (6-12)	TCLP	Solid	7470A	518979

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Metals (Continued)

Prep Batch: 519855 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-9	2615V2-AI-B07 (12-18)	TCLP	Solid	7470A	518979
500-174404-10	2615V2-AI-B07 (18-24)	TCLP	Solid	7470A	518979
500-174404-11	2615V2-AI-B07 (24-30)	TCLP	Solid	7470A	518979
LB 500-518979/1-C	Method Blank	TCLP	Solid	7470A	518979
MB 500-519855/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-519855/15-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174404-10 MS	2615V2-AI-B07 (18-24)	TCLP	Solid	7470A	518979
500-174404-10 DU	2615V2-AI-B07 (18-24)	TCLP	Solid	7470A	518979

Analysis Batch: 519918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	6010B	519276
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	6010B	519276
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	6010B	519276
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	6010B	519276
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	6010B	519276
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	6010B	519276
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	6010B	519276
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	6010B	519276
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	6010B	519276
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	6010B	519276
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	6010B	519276
MB 500-519276/1-A	Method Blank	Total/NA	Solid	6010B	519276
LCS 500-519276/2-A	Lab Control Sample	Total/NA	Solid	6010B	519276
500-174404-1 MS	2615V2-AI-B15 (0-6)	Total/NA	Solid	6010B	519276
500-174404-1 MSD	2615V2-AI-B15 (0-6)	Total/NA	Solid	6010B	519276
500-174404-1 DU	2615V2-AI-B15 (0-6)	Total/NA	Solid	6010B	519276

Prep Batch: 519936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	7471B	
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	7471B	
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	7471B	
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	7471B	
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	7471B	
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	7471B	
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	7471B	
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	7471B	
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	7471B	
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	7471B	
MB 500-519936/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-519936/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174404-10 MS	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	
500-174404-10 MSD	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	
500-174404-10 DU	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	

Analysis Batch: 520015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	TCLP	Solid	7470A	519855
500-174404-2	2615V2-AI-B15 (6-12)	TCLP	Solid	7470A	519855

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Metals (Continued)

Analysis Batch: 520015 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-3	2615V2-AI-B15 (12-18)	TCLP	Solid	7470A	519855
500-174404-4	2615V2-AI-B15 (12-18)D	TCLP	Solid	7470A	519855
500-174404-5	2615V2-AI-B15 (18-24)	TCLP	Solid	7470A	519855
500-174404-6	2615V2-AI-B15 (24-30)	TCLP	Solid	7470A	519855
500-174404-7	2615V2-AI-B07 (0-6)	TCLP	Solid	7470A	519855
500-174404-8	2615V2-AI-B07 (6-12)	TCLP	Solid	7470A	519855
500-174404-9	2615V2-AI-B07 (12-18)	TCLP	Solid	7470A	519855
500-174404-10	2615V2-AI-B07 (18-24)	TCLP	Solid	7470A	519855
500-174404-11	2615V2-AI-B07 (24-30)	TCLP	Solid	7470A	519855
LB 500-518979/1-C	Method Blank	TCLP	Solid	7470A	519855
MB 500-519855/12-A	Method Blank	Total/NA	Solid	7470A	519855
LCS 500-519855/15-A	Lab Control Sample	Total/NA	Solid	7470A	519855
500-174404-10 MS	2615V2-AI-B07 (18-24)	TCLP	Solid	7470A	519855
500-174404-10 DU	2615V2-AI-B07 (18-24)	TCLP	Solid	7470A	519855

Analysis Batch: 520143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	SPLP East	Solid	6010B	519342
500-174404-2	2615V2-AI-B15 (6-12)	SPLP East	Solid	6010B	519342
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	6010B	519276
500-174404-3	2615V2-AI-B15 (12-18)	SPLP East	Solid	6010B	519342
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	6010B	519276
500-174404-4	2615V2-AI-B15 (12-18)D	SPLP East	Solid	6010B	519342
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	6010B	519276
500-174404-5	2615V2-AI-B15 (18-24)	SPLP East	Solid	6010B	519342
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	6010B	519276
500-174404-6	2615V2-AI-B15 (24-30)	SPLP East	Solid	6010B	519342
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	6010B	519276
500-174404-7	2615V2-AI-B07 (0-6)	SPLP East	Solid	6010B	519342
500-174404-8	2615V2-AI-B07 (6-12)	SPLP East	Solid	6010B	519342
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	6010B	519276
500-174404-9	2615V2-AI-B07 (12-18)	SPLP East	Solid	6010B	519342
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	6010B	519276
500-174404-10	2615V2-AI-B07 (18-24)	SPLP East	Solid	6010B	519342
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	6010B	519276
500-174404-11	2615V2-AI-B07 (24-30)	SPLP East	Solid	6010B	519342
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	6010B	519276
LB 500-519191/1-B	Method Blank	SPLP East	Solid	6010B	519342
LCS 500-519342/2-A	Lab Control Sample	Total/NA	Solid	6010B	519342

Analysis Batch: 520145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	6010B	519276
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	6010B	519276
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	6010B	519276
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	6010B	519276
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	6010B	519276
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	6010B	519276
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	6010B	519276
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	6010B	519276
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	6010B	519276

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Metals

Analysis Batch: 520265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	7471B	519936
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	7471B	519936
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	7471B	519936
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	7471B	519936
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	7471B	519936
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	7471B	519936
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	7471B	519936
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	7471B	519936
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	7471B	519936
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	519936
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	7471B	519936
MB 500-519936/12-A	Method Blank	Total/NA	Solid	7471B	519936
LCS 500-519936/13-A	Lab Control Sample	Total/NA	Solid	7471B	519936
500-174404-10 MS	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	519936
500-174404-10 MSD	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	519936
500-174404-10 DU	2615V2-AI-B07 (18-24)	Total/NA	Solid	7471B	519936

General Chemistry

Analysis Batch: 518884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	9045D	
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	9045D	
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	9045D	
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	9045D	
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	9045D	
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	9045D	
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	9045D	
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	9045D	
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	9045D	
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	9045D	
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	9045D	
LCS 500-518884/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-518884/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-174404-5 DU	2615V2-AI-B15 (18-24)	Total/NA	Solid	9045D	

Analysis Batch: 518912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174404-1	2615V2-AI-B15 (0-6)	Total/NA	Solid	Moisture	
500-174404-2	2615V2-AI-B15 (6-12)	Total/NA	Solid	Moisture	
500-174404-3	2615V2-AI-B15 (12-18)	Total/NA	Solid	Moisture	
500-174404-4	2615V2-AI-B15 (12-18)D	Total/NA	Solid	Moisture	
500-174404-5	2615V2-AI-B15 (18-24)	Total/NA	Solid	Moisture	
500-174404-6	2615V2-AI-B15 (24-30)	Total/NA	Solid	Moisture	
500-174404-7	2615V2-AI-B07 (0-6)	Total/NA	Solid	Moisture	
500-174404-8	2615V2-AI-B07 (6-12)	Total/NA	Solid	Moisture	
500-174404-9	2615V2-AI-B07 (12-18)	Total/NA	Solid	Moisture	
500-174404-10	2615V2-AI-B07 (18-24)	Total/NA	Solid	Moisture	
500-174404-11	2615V2-AI-B07 (24-30)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174404-1	2615V2-AI-B15 (0-6)	95	115	87	97
500-174404-2	2615V2-AI-B15 (6-12)	109	112	101	94
500-174404-3	2615V2-AI-B15 (12-18)	106	112	99	92
500-174404-4	2615V2-AI-B15 (12-18)D	105	117	98	93
500-174404-5	2615V2-AI-B15 (18-24)	105	110	96	95
500-174404-6	2615V2-AI-B15 (24-30)	103	114	99	92
500-174404-7	2615V2-AI-B07 (0-6)	108	115	99	94
500-174404-8	2615V2-AI-B07 (6-12)	109	118	101	92
500-174404-9	2615V2-AI-B07 (12-18)	109	110	99	94
500-174404-10	2615V2-AI-B07 (18-24)	109	114	100	91
500-174404-11	2615V2-AI-B07 (24-30)	106	113	95	94
LCS 500-519702/4	Lab Control Sample	84	97	85	97
LCS 500-519967/25	Lab Control Sample	101	103	98	90
LCS 500-519702/5	Lab Control Sample Dup	85	96	84	97
MB 500-519702/7	Method Blank	86	101	85	95
MB 500-519967/6	Method Blank	103	105	96	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174404-1	2615V2-AI-B15 (0-6)	53	58	64	94	79	91
500-174404-2	2615V2-AI-B15 (6-12)	56	61	69	102	103	97
500-174404-3	2615V2-AI-B15 (12-18)	56	61	67	90	67	92
500-174404-4	2615V2-AI-B15 (12-18)D	45	54	58	82	65	85
500-174404-5	2615V2-AI-B15 (18-24)	47	54	64	84	71	82
500-174404-6	2615V2-AI-B15 (24-30)	55	51	80	100	66	100
500-174404-7	2615V2-AI-B07 (0-6)	53	61	70	101	94	101
500-174404-8	2615V2-AI-B07 (6-12)	50	59	71	94	59	97
500-174404-9	2615V2-AI-B07 (12-18)	53	64	75	106	76	101
500-174404-10	2615V2-AI-B07 (18-24)	54	65	77	106	78	100
500-174404-11	2615V2-AI-B07 (24-30)	56	61	77	100	70	100
LCS 500-520063/2-A	Lab Control Sample	82	76	96	100	57	97
MB 500-520063/1-A	Method Blank	78	74	90	94	52	105

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-519702/7
Matrix: Solid
Analysis Batch: 519702

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/10/19 11:18	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/10/19 11:18	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/10/19 11:18	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 11:18	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 11:18	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/10/19 11:18	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/10/19 11:18	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/10/19 11:18	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/10/19 11:18	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/10/19 11:18	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/10/19 11:18	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/10/19 11:18	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/10/19 11:18	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/10/19 11:18	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/10/19 11:18	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/10/19 11:18	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/10/19 11:18	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/10/19 11:18	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/10/19 11:18	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/10/19 11:18	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/10/19 11:18	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/10/19 11:18	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/10/19 11:18	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/10/19 11:18	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/10/19 11:18	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/10/19 11:18	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/10/19 11:18	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/10/19 11:18	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/10/19 11:18	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/10/19 11:18	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/10/19 11:18	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/10/19 11:18	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/10/19 11:18	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/10/19 11:18	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/10/19 11:18	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/10/19 11:18	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/10/19 11:18	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	86		70 - 134		12/10/19 11:18	1
4-Bromofluorobenzene (Surr)	101		75 - 131		12/10/19 11:18	1
Dibromofluoromethane	85		75 - 126		12/10/19 11:18	1
Toluene-d8 (Surr)	95		75 - 124		12/10/19 11:18	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519702/4

Matrix: Solid

Analysis Batch: 519702

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0442		mg/Kg		88	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0443		mg/Kg		89	70 - 122
1,1,2-Trichloroethane	0.0500	0.0460		mg/Kg		92	70 - 125
1,1-Dichloroethane	0.0500	0.0454		mg/Kg		91	70 - 125
1,1-Dichloroethene	0.0500	0.0432		mg/Kg		86	70 - 120
1,2-Dichloroethane	0.0500	0.0437		mg/Kg		87	70 - 130
1,2-Dichloropropane	0.0500	0.0471		mg/Kg		94	70 - 125
2-Butanone (MEK)	0.0500	0.0345		mg/Kg		69	47 - 138
2-Hexanone	0.0500	0.0343		mg/Kg		69	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0340		mg/Kg		68	50 - 148
Acetone	0.0500	0.0685		mg/Kg		137	40 - 150
Benzene	0.0500	0.0461		mg/Kg		92	70 - 125
Bromodichloromethane	0.0500	0.0436		mg/Kg		87	67 - 129
Bromoform	0.0500	0.0380		mg/Kg		76	68 - 136
Bromomethane	0.0500	0.0488		mg/Kg		98	70 - 130
Carbon disulfide	0.0500	0.0422		mg/Kg		84	70 - 129
Carbon tetrachloride	0.0500	0.0434		mg/Kg		87	75 - 125
Chlorobenzene	0.0500	0.0479		mg/Kg		96	50 - 150
Chloroethane	0.0500	0.0525		mg/Kg		105	75 - 125
Chloroform	0.0500	0.0435		mg/Kg		87	57 - 135
Chloromethane	0.0500	0.0463		mg/Kg		93	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0436		mg/Kg		87	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0466		mg/Kg		93	70 - 125
Dibromochloromethane	0.0500	0.0415		mg/Kg		83	69 - 125
Ethylbenzene	0.0500	0.0472		mg/Kg		94	61 - 136
Methyl tert-butyl ether	0.0500	0.0440		mg/Kg		88	50 - 140
Methylene Chloride	0.0500	0.0450		mg/Kg		90	70 - 126
Styrene	0.0500	0.0456		mg/Kg		91	70 - 125
Tetrachloroethene	0.0500	0.0463		mg/Kg		93	70 - 124
Toluene	0.0500	0.0477		mg/Kg		95	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0436		mg/Kg		87	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0454		mg/Kg		91	70 - 125
Trichloroethene	0.0500	0.0461		mg/Kg		92	70 - 125
Vinyl acetate	0.0500	0.0395		mg/Kg		79	40 - 153
Vinyl chloride	0.0500	0.0458		mg/Kg		92	70 - 125
Xylenes, Total	0.100	0.0949		mg/Kg		95	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	84		70 - 134
4-Bromofluorobenzene (Surr)	97		75 - 131
Dibromofluoromethane	85		75 - 126
Toluene-d8 (Surr)	97		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-519702/5
Matrix: Solid
Analysis Batch: 519702

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0443		mg/Kg		89	70 - 128	0	30
1,1,2,2-Tetrachloroethane	0.0500	0.0434		mg/Kg		87	70 - 122	2	30
1,1,2-Trichloroethane	0.0500	0.0459		mg/Kg		92	70 - 125	0	30
1,1-Dichloroethane	0.0500	0.0457		mg/Kg		91	70 - 125	1	30
1,1-Dichloroethene	0.0500	0.0436		mg/Kg		87	70 - 120	1	30
1,2-Dichloroethane	0.0500	0.0439		mg/Kg		88	70 - 130	1	30
1,2-Dichloropropane	0.0500	0.0470		mg/Kg		94	70 - 125	0	30
2-Butanone (MEK)	0.0500	0.0332		mg/Kg		66	47 - 138	4	30
2-Hexanone	0.0500	0.0337		mg/Kg		67	48 - 146	2	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0334		mg/Kg		67	50 - 148	2	30
Acetone	0.0500	0.0543		mg/Kg		109	40 - 150	23	30
Benzene	0.0500	0.0471		mg/Kg		94	70 - 125	2	30
Bromodichloromethane	0.0500	0.0438		mg/Kg		88	67 - 129	1	30
Bromoform	0.0500	0.0383		mg/Kg		77	68 - 136	1	30
Bromomethane	0.0500	0.0473		mg/Kg		95	70 - 130	3	30
Carbon disulfide	0.0500	0.0430		mg/Kg		86	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0451		mg/Kg		90	75 - 125	4	30
Chlorobenzene	0.0500	0.0491		mg/Kg		98	50 - 150	3	30
Chloroethane	0.0500	0.0510		mg/Kg		102	75 - 125	3	30
Chloroform	0.0500	0.0438		mg/Kg		88	57 - 135	1	30
Chloromethane	0.0500	0.0452		mg/Kg		90	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0482		mg/Kg		96	70 - 125	3	30
Dibromochloromethane	0.0500	0.0414		mg/Kg		83	69 - 125	0	30
Ethylbenzene	0.0500	0.0474		mg/Kg		95	61 - 136	0	30
Methyl tert-butyl ether	0.0500	0.0442		mg/Kg		88	50 - 140	0	30
Methylene Chloride	0.0500	0.0450		mg/Kg		90	70 - 126	0	30
Styrene	0.0500	0.0461		mg/Kg		92	70 - 125	1	30
Tetrachloroethene	0.0500	0.0474		mg/Kg		95	70 - 124	2	30
Toluene	0.0500	0.0491		mg/Kg		98	70 - 125	3	30
trans-1,2-Dichloroethene	0.0500	0.0447		mg/Kg		89	70 - 125	2	30
trans-1,3-Dichloropropene	0.0500	0.0456		mg/Kg		91	70 - 125	1	30
Trichloroethene	0.0500	0.0463		mg/Kg		93	70 - 125	0	30
Vinyl acetate	0.0500	0.0402		mg/Kg		80	40 - 153	2	30
Vinyl chloride	0.0500	0.0450		mg/Kg		90	70 - 125	2	30
Xylenes, Total	0.100	0.0963		mg/Kg		96	53 - 147	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	96		75 - 131
Dibromofluoromethane	84		75 - 126
Toluene-d8 (Surr)	97		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-519967/6
Matrix: Solid
Analysis Batch: 519967

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/11/19 11:47	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/11/19 11:47	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/11/19 11:47	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/11/19 11:47	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/11/19 11:47	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/11/19 11:47	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/11/19 11:47	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/11/19 11:47	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/11/19 11:47	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/11/19 11:47	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/11/19 11:47	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/11/19 11:47	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/11/19 11:47	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/11/19 11:47	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/11/19 11:47	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/11/19 11:47	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/11/19 11:47	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/11/19 11:47	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/11/19 11:47	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/11/19 11:47	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/11/19 11:47	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/11/19 11:47	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/11/19 11:47	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/11/19 11:47	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/11/19 11:47	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/11/19 11:47	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/11/19 11:47	1
Methylene Chloride	0.00449	J	0.0050	0.0020	mg/Kg			12/11/19 11:47	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/11/19 11:47	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/11/19 11:47	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/11/19 11:47	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/11/19 11:47	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/11/19 11:47	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/11/19 11:47	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/11/19 11:47	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/11/19 11:47	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/11/19 11:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 134		12/11/19 11:47	1
4-Bromofluorobenzene (Surr)	105		75 - 131		12/11/19 11:47	1
Dibromofluoromethane	96		75 - 126		12/11/19 11:47	1
Toluene-d8 (Surr)	90		75 - 124		12/11/19 11:47	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-519967/25

Matrix: Solid

Analysis Batch: 519967

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0519		mg/Kg		104	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0439		mg/Kg		88	70 - 122
1,1,2-Trichloroethane	0.0500	0.0395		mg/Kg		79	70 - 125
1,1-Dichloroethane	0.0500	0.0515		mg/Kg		103	70 - 125
1,1-Dichloroethene	0.0500	0.0489		mg/Kg		98	70 - 120
1,2-Dichloroethane	0.0500	0.0487		mg/Kg		97	70 - 130
1,2-Dichloropropane	0.0500	0.0465		mg/Kg		93	70 - 125
2-Butanone (MEK)	0.0500	0.0479		mg/Kg		96	47 - 138
2-Hexanone	0.0500	0.0481		mg/Kg		96	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0475		mg/Kg		95	50 - 148
Acetone	0.0500	0.0587		mg/Kg		117	40 - 150
Benzene	0.0500	0.0472		mg/Kg		94	70 - 125
Bromodichloromethane	0.0500	0.0463		mg/Kg		93	67 - 129
Bromoform	0.0500	0.0429		mg/Kg		86	68 - 136
Bromomethane	0.0500	0.0388		mg/Kg		78	70 - 130
Carbon disulfide	0.0500	0.0505		mg/Kg		101	70 - 129
Carbon tetrachloride	0.0500	0.0525		mg/Kg		105	75 - 125
Chlorobenzene	0.0500	0.0426		mg/Kg		85	50 - 150
Chloroethane	0.0500	0.0477		mg/Kg		95	75 - 125
Chloroform	0.0500	0.0482		mg/Kg		96	57 - 135
Chloromethane	0.0500	0.0662	*	mg/Kg		132	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0480		mg/Kg		96	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0415		mg/Kg		83	70 - 125
Dibromochloromethane	0.0500	0.0415		mg/Kg		83	69 - 125
Ethylbenzene	0.0500	0.0419		mg/Kg		84	61 - 136
Methyl tert-butyl ether	0.0500	0.0500		mg/Kg		100	50 - 140
Methylene Chloride	0.0500	0.0535		mg/Kg		107	70 - 126
Styrene	0.0500	0.0426		mg/Kg		85	70 - 125
Tetrachloroethene	0.0500	0.0445		mg/Kg		89	70 - 124
Toluene	0.0500	0.0418		mg/Kg		84	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0486		mg/Kg		97	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0416		mg/Kg		83	70 - 125
Trichloroethene	0.0500	0.0477		mg/Kg		95	70 - 125
Vinyl acetate	0.0500	0.0440		mg/Kg		88	40 - 153
Vinyl chloride	0.0500	0.0579		mg/Kg		116	70 - 125
Xylenes, Total	0.100	0.0881		mg/Kg		88	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 134
4-Bromofluorobenzene (Surr)	103		75 - 131
Dibromofluoromethane	98		75 - 126
Toluene-d8 (Surr)	90		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-520063/1-A
Matrix: Solid
Analysis Batch: 520210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520063

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/11/19 15:16	12/12/19 12:39	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-520063/1-A
Matrix: Solid
Analysis Batch: 520210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520063

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/11/19 15:16	12/12/19 12:39	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/11/19 15:16	12/12/19 12:39	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	78		31 - 166	12/11/19 15:16	12/12/19 12:39	1
Phenol-d5	74		30 - 153	12/11/19 15:16	12/12/19 12:39	1
Nitrobenzene-d5	90		37 - 147	12/11/19 15:16	12/12/19 12:39	1
2-Fluorobiphenyl	94		43 - 145	12/11/19 15:16	12/12/19 12:39	1
2,4,6-Tribromophenol	52		31 - 143	12/11/19 15:16	12/12/19 12:39	1
Terphenyl-d14	105		42 - 157	12/11/19 15:16	12/12/19 12:39	1

Lab Sample ID: LCS 500-520063/2-A
Matrix: Solid
Analysis Batch: 520210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bis(2-chloroethyl)ether	1.33	1.25		mg/Kg		94	55 - 111
1,3-Dichlorobenzene	1.33	1.17		mg/Kg		88	65 - 124
1,4-Dichlorobenzene	1.33	1.14		mg/Kg		86	61 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		90	62 - 110
2-Methylphenol	1.33	1.01		mg/Kg		76	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	0.686		mg/Kg		51	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.16		mg/Kg		87	56 - 118
Hexachloroethane	1.33	1.21		mg/Kg		91	60 - 114
2-Chlorophenol	1.33	1.21		mg/Kg		91	64 - 110
Nitrobenzene	1.33	1.29		mg/Kg		97	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.33		mg/Kg		100	60 - 112
1,2,4-Trichlorobenzene	1.33	1.17		mg/Kg		88	66 - 117
Isophorone	1.33	1.27		mg/Kg		95	55 - 110
2,4-Dimethylphenol	1.33	1.22		mg/Kg		92	60 - 110
Hexachlorobutadiene	1.33	1.06		mg/Kg		79	56 - 120
Naphthalene	1.33	1.30		mg/Kg		98	63 - 110
2,4-Dichlorophenol	1.33	1.27		mg/Kg		95	58 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-520063/2-A
Matrix: Solid
Analysis Batch: 520210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.19		mg/Kg		89	30 - 150
2,4,6-Trichlorophenol	1.33	1.08		mg/Kg		81	57 - 120
2,4,5-Trichlorophenol	1.33	1.11		mg/Kg		83	50 - 120
Hexachlorocyclopentadiene	1.33	<0.67	*	mg/Kg		5	10 - 133
2-Methylnaphthalene	1.33	1.29		mg/Kg		97	69 - 112
2-Nitroaniline	1.33	1.22		mg/Kg		92	57 - 124
2-Chloronaphthalene	1.33	1.27		mg/Kg		95	69 - 114
4-Chloro-3-methylphenol	1.33	1.33		mg/Kg		100	65 - 122
2,6-Dinitrotoluene	1.33	1.44		mg/Kg		108	70 - 123
2-Nitrophenol	1.33	1.28		mg/Kg		96	60 - 120
3-Nitroaniline	1.33	1.12		mg/Kg		84	40 - 122
Dimethyl phthalate	1.33	1.30		mg/Kg		97	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		13	10 - 100
Acenaphthylene	1.33	1.36		mg/Kg		102	68 - 120
2,4-Dinitrotoluene	1.33	1.37		mg/Kg		102	69 - 124
Acenaphthene	1.33	1.31		mg/Kg		98	65 - 124
Dibenzofuran	1.33	1.32		mg/Kg		99	66 - 115
4-Nitrophenol	2.67	2.39		mg/Kg		90	30 - 122
Fluorene	1.33	1.32		mg/Kg		99	62 - 120
4-Nitroaniline	1.33	1.12		mg/Kg		84	60 - 160
4-Bromophenyl phenyl ether	1.33	1.18		mg/Kg		88	68 - 118
Hexachlorobenzene	1.33	1.10		mg/Kg		83	63 - 124
Diethyl phthalate	1.33	1.32		mg/Kg		99	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.19		mg/Kg		89	62 - 119
Pentachlorophenol	2.67	1.06		mg/Kg		40	13 - 112
N-Nitrosodiphenylamine	1.33	1.39		mg/Kg		104	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.902		mg/Kg		34	10 - 110
Phenanthrene	1.33	1.36		mg/Kg		102	62 - 120
Anthracene	1.33	1.38		mg/Kg		103	70 - 114
Carbazole	1.33	1.61		mg/Kg		121	65 - 142
Di-n-butyl phthalate	1.33	1.45		mg/Kg		109	65 - 120
Fluoranthene	1.33	1.27		mg/Kg		95	62 - 120
Pyrene	1.33	1.44		mg/Kg		108	61 - 128
Butyl benzyl phthalate	1.33	1.60		mg/Kg		120	71 - 129
Benzo[a]anthracene	1.33	1.28		mg/Kg		96	67 - 122
Chrysene	1.33	1.31		mg/Kg		99	63 - 120
3,3'-Dichlorobenzidine	1.33	1.01		mg/Kg		76	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.62		mg/Kg		122	72 - 131
Di-n-octyl phthalate	1.33	1.40		mg/Kg		105	68 - 134
Benzo[b]fluoranthene	1.33	1.43		mg/Kg		108	69 - 129
Benzo[k]fluoranthene	1.33	1.34		mg/Kg		101	68 - 127
Benzo[a]pyrene	1.33	1.40		mg/Kg		105	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.61		mg/Kg		121	68 - 130
Dibenz(a,h)anthracene	1.33	1.46		mg/Kg		110	64 - 131
Benzo[g,h,i]perylene	1.33	1.41		mg/Kg		106	72 - 131
3 & 4 Methylphenol	1.33	1.18		mg/Kg		89	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-520063/2-A
Matrix: Solid
Analysis Batch: 520210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520063

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	82		31 - 166
Phenol-d5	76		30 - 153
Nitrobenzene-d5	96		37 - 147
2-Fluorobiphenyl	100		43 - 145
2,4,6-Tribromophenol	57		31 - 143
Terphenyl-d14	97		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-519242/2-A
Matrix: Solid
Analysis Batch: 519679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519242

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Barium	0.500	0.450	J	mg/L		90	80 - 120
Beryllium	0.0500	0.0476		mg/L		95	80 - 120
Boron	1.00	0.881		mg/L		88	80 - 120
Cadmium	0.0500	0.0503		mg/L		101	80 - 120
Chromium	0.200	0.190		mg/L		95	80 - 120
Cobalt	0.500	0.496		mg/L		99	80 - 120
Iron	1.00	1.02		mg/L		102	80 - 120
Lead	0.100	0.0947		mg/L		95	80 - 120
Manganese	0.500	0.474		mg/L		95	80 - 120
Nickel	0.500	0.496		mg/L		99	80 - 120
Selenium	0.100	0.115		mg/L		115	80 - 120
Silver	0.0500	0.0567		mg/L		113	80 - 120
Zinc	0.500	0.576		mg/L		115	80 - 120

Lab Sample ID: MB 500-519276/1-A
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519276

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Barium	0.448	J	1.0	0.11	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Boron	<5.0		5.0	0.47	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Cadmium	0.0399	J	0.20	0.036	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Calcium	4.08	J	20	3.4	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Copper	<1.0		1.0	0.28	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Iron	42.1		20	10	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Lead	0.266	J	0.50	0.23	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Magnesium	<10		10	5.0	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Manganese	0.213	J	1.0	0.15	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Potassium	<50		50	18	mg/Kg		12/06/19 17:30	12/11/19 04:39	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-519276/1-A
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<1.0		1.0	0.59	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Silver	<0.50		0.50	0.13	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Sodium	<100		100	15	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/06/19 17:30	12/11/19 04:39	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/06/19 17:30	12/11/19 04:39	1

Lab Sample ID: LCS 500-519276/2-A
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	47.8		mg/Kg		96	80 - 120
Arsenic	10.0	9.26		mg/Kg		93	80 - 120
Barium	200	200		mg/Kg		100	80 - 120
Beryllium	5.00	4.70		mg/Kg		94	80 - 120
Boron	100	85.9		mg/Kg		86	80 - 120
Cadmium	5.00	4.74		mg/Kg		95	80 - 120
Calcium	1000	963		mg/Kg		96	80 - 120
Chromium	20.0	20.4		mg/Kg		102	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	25.0	23.6		mg/Kg		95	80 - 120
Iron	100	105		mg/Kg		105	80 - 120
Lead	10.0	10.1		mg/Kg		101	80 - 120
Magnesium	1000	898		mg/Kg		90	80 - 120
Manganese	50.0	47.0		mg/Kg		94	80 - 120
Nickel	50.0	47.8		mg/Kg		96	80 - 120
Potassium	1000	926		mg/Kg		93	80 - 120
Selenium	10.0	8.63		mg/Kg		86	80 - 120
Silver	5.00	4.45		mg/Kg		89	80 - 120
Sodium	1000	930		mg/Kg		93	80 - 120
Thallium	10.0	9.14		mg/Kg		91	80 - 120
Vanadium	50.0	48.1		mg/Kg		96	80 - 120
Zinc	50.0	47.5		mg/Kg		95	80 - 120

Lab Sample ID: 500-174404-1 MS
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: 2615V2-AI-B15 (0-6)
Prep Type: Total/NA
Prep Batch: 519276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.61	J F1 F2	29.7	4.64	F1	mg/Kg	☼	14	75 - 125
Arsenic	7.9	F1	5.94	11.3	F1	mg/Kg	☼	58	75 - 125
Barium	48	B	119	152		mg/Kg	☼	88	75 - 125
Beryllium	0.68		2.97	3.33		mg/Kg	☼	89	75 - 125
Boron	13		59.4	63.2		mg/Kg	☼	84	75 - 125
Cadmium	0.18	B	2.97	2.61		mg/Kg	☼	82	75 - 125
Calcium	28000	B	594	27200	4	mg/Kg	☼	-184	75 - 125
Chromium	18		11.9	31.8		mg/Kg	☼	115	75 - 125
Cobalt	15		29.7	44.2		mg/Kg	☼	98	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174404-1 MS
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: 2615V2-AI-B15 (0-6)
Prep Type: Total/NA
Prep Batch: 519276

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Copper	33	F1	14.9	40.1	F1	mg/Kg	☼	49		75 - 125
Iron	22000	B	59.4	22200	4	mg/Kg	☼	127		75 - 125
Lead	16	B	5.94	21.7		mg/Kg	☼	93		75 - 125
Magnesium	19000		594	18400	4	mg/Kg	☼	-80		75 - 125
Manganese	310	B	29.7	310	4	mg/Kg	☼	13		75 - 125
Nickel	43		29.7	71.0		mg/Kg	☼	96		75 - 125
Potassium	2800		594	5310	4	mg/Kg	☼	415		75 - 125
Selenium	0.75	F1	5.94	4.86	F1	mg/Kg	☼	69		75 - 125
Silver	2.3		2.97	5.01		mg/Kg	☼	92		75 - 125
Sodium	1100		594	1670		mg/Kg	☼	92		75 - 125
Thallium	2.2		5.94	6.94		mg/Kg	☼	80		75 - 125
Vanadium	18		29.7	49.3		mg/Kg	☼	104		75 - 125
Zinc	51		29.7	83.2		mg/Kg	☼	107		75 - 125

Lab Sample ID: 500-174404-1 MSD
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: 2615V2-AI-B15 (0-6)
Prep Type: Total/NA
Prep Batch: 519276

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier		Result	Qualifier						Limit	
Antimony	0.61	J F1 F2	29.0	6.06	F1 F2	mg/Kg	☼	19		75 - 125	27	20
Arsenic	7.9	F1	5.79	12.9		mg/Kg	☼	87		75 - 125	13	20
Barium	48	B	116	150		mg/Kg	☼	88		75 - 125	2	20
Beryllium	0.68		2.90	3.24		mg/Kg	☼	88		75 - 125	3	20
Boron	13		57.9	64.7		mg/Kg	☼	89		75 - 125	2	20
Cadmium	0.18	B	2.90	2.60		mg/Kg	☼	84		75 - 125	0	20
Calcium	28000	B	579	27800	4	mg/Kg	☼	-84		75 - 125	2	20
Chromium	18		11.6	31.0		mg/Kg	☼	111		75 - 125	2	20
Cobalt	15		29.0	44.0		mg/Kg	☼	100		75 - 125	0	20
Copper	33	F1	14.5	46.9		mg/Kg	☼	97		75 - 125	16	20
Iron	22000	B	57.9	21800	4	mg/Kg	☼	-583		75 - 125	2	20
Lead	16	B	5.79	21.5		mg/Kg	☼	92		75 - 125	1	20
Magnesium	19000		579	19000	4	mg/Kg	☼	25		75 - 125	3	20
Manganese	310	B	29.0	306	4	mg/Kg	☼	-0.6		75 - 125	1	20
Nickel	43		29.0	69.8		mg/Kg	☼	94		75 - 125	2	20
Potassium	2800		579	5210	4	mg/Kg	☼	408		75 - 125	2	20
Selenium	0.75	F1	5.79	4.77	F1	mg/Kg	☼	69		75 - 125	2	20
Silver	2.3		2.90	4.95		mg/Kg	☼	92		75 - 125	1	20
Sodium	1100		579	1600		mg/Kg	☼	83		75 - 125	4	20
Thallium	2.2		5.79	6.74		mg/Kg	☼	79		75 - 125	3	20
Vanadium	18		29.0	48.8		mg/Kg	☼	105		75 - 125	1	20
Zinc	51		29.0	80.1		mg/Kg	☼	99		75 - 125	4	20

Lab Sample ID: 500-174404-1 DU
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: 2615V2-AI-B15 (0-6)
Prep Type: Total/NA
Prep Batch: 519276

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier		Result				Qualifier
Antimony	0.61	J F1 F2	0.419	J F5	mg/Kg	☼		37
Arsenic	7.9	F1	7.90		mg/Kg	☼		0.08

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174404-1 DU
Matrix: Solid
Analysis Batch: 519918

Client Sample ID: 2615V2-AI-B15 (0-6)
Prep Type: Total/NA
Prep Batch: 519276

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Barium	48	B	47.4		mg/Kg	*	1	20
Beryllium	0.68		0.735		mg/Kg	*	8	20
Boron	13		15.8		mg/Kg	*	17	20
Cadmium	0.18	B	0.548	F3	mg/Kg	*	101	20
Calcium	28000	B	29000		mg/Kg	*	3	20
Chromium	18		19.4		mg/Kg	*	7	20
Cobalt	15		15.4		mg/Kg	*	2	20
Copper	33	F1	34.0		mg/Kg	*	4	20
Iron	22000	B	21400		mg/Kg	*	4	20
Lead	16	B	17.2		mg/Kg	*	6	20
Magnesium	19000		19000		mg/Kg	*	0.6	20
Manganese	310	B	300		mg/Kg	*	2	20
Nickel	43		42.1		mg/Kg	*	1	20
Potassium	2800		3230		mg/Kg	*	13	20
Selenium	0.75	F1	0.963	F5	mg/Kg	*	24	20
Silver	2.3		2.44		mg/Kg	*	7	20
Sodium	1100		1130		mg/Kg	*	0.6	20
Thallium	2.2		2.10		mg/Kg	*	3	20
Vanadium	18		20.5		mg/Kg	*	11	20
Zinc	51		182	F3	mg/Kg	*	112	20

Lab Sample ID: LCS 500-519342/2-A
Matrix: Solid
Analysis Batch: 520143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519342
%Rec.

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Lead	0.100	0.0941		mg/L		94	80 - 120
Manganese	0.500	0.487		mg/L		97	80 - 120

Lab Sample ID: LB 500-518979/1-B
Matrix: Solid
Analysis Batch: 519679

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519242

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	<0.50		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/06/19 15:42	12/09/19 20:41	1
Boron	<0.50		0.50	0.050	mg/L		12/06/19 15:42	12/09/19 20:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/06/19 15:42	12/09/19 20:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:41	1
Cobalt	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:41	1
Iron	0.415		0.40	0.20	mg/L		12/06/19 15:42	12/09/19 20:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/06/19 15:42	12/09/19 20:41	1
Manganese	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:41	1
Nickel	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/06/19 15:42	12/09/19 20:41	1
Silver	<0.025		0.025	0.010	mg/L		12/06/19 15:42	12/09/19 20:41	1
Zinc	0.0274	J	0.50	0.020	mg/L		12/06/19 15:42	12/09/19 20:41	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174404-11 MS
Matrix: Solid
Analysis Batch: 519679

Client Sample ID: 2615V2-AI-B07 (24-30)
Prep Type: TCLP
Prep Batch: 519242

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Barium	0.64		0.500	1.10		mg/L		92	75 - 125
Beryllium	<0.0040		0.0500	0.0471		mg/L		94	75 - 125
Boron	0.12	J	1.00	0.997		mg/L		88	75 - 125
Cadmium	<0.0050		0.0500	0.0515		mg/L		103	75 - 125
Chromium	<0.025		0.200	0.180		mg/L		90	75 - 125
Cobalt	<0.025		0.500	0.506		mg/L		101	75 - 125
Iron	<0.40		1.00	1.01		mg/L		101	75 - 125
Lead	<0.0075		0.100	0.0945		mg/L		94	75 - 125
Manganese	1.8		0.500	2.36		mg/L		103	75 - 125
Nickel	0.025		0.500	0.528		mg/L		101	75 - 125
Selenium	<0.050		0.100	0.103		mg/L		103	75 - 125
Silver	<0.025		0.0500	0.0588		mg/L		118	75 - 125
Zinc	0.13	J B	0.500	0.690		mg/L		111	75 - 125

Lab Sample ID: 500-174404-11 DU
Matrix: Solid
Analysis Batch: 519679

Client Sample ID: 2615V2-AI-B07 (24-30)
Prep Type: TCLP
Prep Batch: 519242

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Barium	0.64		0.596		mg/L		7	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.12	J	0.114	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	<0.025		<0.025		mg/L		NC	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.71		mg/L		7	20
Nickel	0.025		0.0243	J	mg/L		4	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.13	J B	0.129	J	mg/L		5	20

Lab Sample ID: LB 500-519191/1-B
Matrix: Solid
Analysis Batch: 520143

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 519342

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/07/19 21:35	12/11/19 19:22	1
Manganese	<0.025		0.025	0.010	mg/L		12/07/19 21:35	12/11/19 19:22	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-519242/2-A
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519242

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Antimony	0.500	0.503		mg/L		101	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-519242/2-A
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.100	0.0917		mg/L		92	80 - 120

Lab Sample ID: LB 500-518979/1-B
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519242

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/06/19 15:42	12/09/19 20:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/06/19 15:42	12/09/19 20:26	1

Lab Sample ID: 500-174404-11 MS
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: 2615V2-AI-B07 (24-30)
Prep Type: TCLP
Prep Batch: 519242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0060		0.500	0.501		mg/L		100	75 - 125
Thallium	<0.0020		0.100	0.0963		mg/L		96	75 - 125

Lab Sample ID: 500-174404-11 DU
Matrix: Solid
Analysis Batch: 519765

Client Sample ID: 2615V2-AI-B07 (24-30)
Prep Type: TCLP
Prep Batch: 519242

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-519855/12-A
Matrix: Solid
Analysis Batch: 520015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:30	1

Lab Sample ID: LCS 500-519855/15-A
Matrix: Solid
Analysis Batch: 520015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519855

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00191		mg/L		95	80 - 120

Lab Sample ID: LB 500-518979/1-C
Matrix: Solid
Analysis Batch: 520015

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 519855

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/10/19 16:35	12/11/19 10:34	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-174404-10 MS
Matrix: Solid
Analysis Batch: 520015

Client Sample ID: 2615V2-AI-B07 (18-24)
Prep Type: TCLP
Prep Batch: 519855

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00100		mg/L		100	75 - 125

Lab Sample ID: 500-174404-10 DU
Matrix: Solid
Analysis Batch: 520015

Client Sample ID: 2615V2-AI-B07 (18-24)
Prep Type: TCLP
Prep Batch: 519855

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-519936/12-A
Matrix: Solid
Analysis Batch: 520265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 519936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/11/19 12:45	12/12/19 08:31	1

Lab Sample ID: LCS 500-519936/13-A
Matrix: Solid
Analysis Batch: 520265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 519936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.158		mg/Kg		95	80 - 120

Lab Sample ID: 500-174404-10 MS
Matrix: Solid
Analysis Batch: 520265

Client Sample ID: 2615V2-AI-B07 (18-24)
Prep Type: Total/NA
Prep Batch: 519936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.020		0.0927	0.109		mg/Kg	☼	96	75 - 125

Lab Sample ID: 500-174404-10 MSD
Matrix: Solid
Analysis Batch: 520265

Client Sample ID: 2615V2-AI-B07 (18-24)
Prep Type: Total/NA
Prep Batch: 519936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.020		0.0929	0.101		mg/Kg	☼	87	75 - 125	8	20

Lab Sample ID: 500-174404-10 DU
Matrix: Solid
Analysis Batch: 520265

Client Sample ID: 2615V2-AI-B07 (18-24)
Prep Type: Total/NA
Prep Batch: 519936

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.020		0.0244		mg/Kg	☼	18	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Method: 9045D - pH

Lab Sample ID: 500-174404-5 DU
Matrix: Solid
Analysis Batch: 518884

Client Sample ID: 2615V2-AI-B15 (18-24)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.1		8.1		SU		0.1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 19:42	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 20:49	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:33	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:38	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884	(Start) 12/05/19 12:45 (End) 12/05/19 12:51	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B15 (0-6)

Lab Sample ID: 500-174404-1

Date Collected: 12/03/19 09:30

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519702	12/10/19 20:07	JDD	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 20:10	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 04:59	EEN	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:35	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 19:46	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 20:54	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:37	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:40	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884	12/05/19 12:51 (Start)	MTB	TAL CHI
						12/05/19 12:58 (End)		
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B15 (6-12)

Lab Sample ID: 500-174404-2

Date Collected: 12/03/19 09:40

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 13:53	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 19:01	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:24	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:20	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 14:56	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:37	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 19:50	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 20:58	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:40	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:42	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884	12/05/19 12:58 (Start)	MTB	TAL CHI
						12/05/19 13:05 (End)		

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B15 (12-18)

Lab Sample ID: 500-174404-3

Date Collected: 12/03/19 09:50

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 14:18	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 19:24	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:28	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:24	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:00	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:39	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 19:54	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:02	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:54	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:43	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884		MTB	TAL CHI
					(Start)	12/05/19 13:05		
					(End)	12/05/19 13:12		
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (12-18)D

Lab Sample ID: 500-174404-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 14:43	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 19:47	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:32	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:28	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:04	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:41	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 19:58	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:19	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 20:58	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:45	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884	(Start) 12/05/19 13:19 (End) 12/05/19 13:26	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 15:09	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 16:22	AJD	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (18-24)

Lab Sample ID: 500-174404-5

Date Collected: 12/03/19 10:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:36	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:33	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:09	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:48	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 20:02	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:23	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 21:01	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:46	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884		MTB	TAL CHI
					(Start)	12/05/19 13:33		
					(End)	12/05/19 13:40		
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 15:34	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 16:44	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:40	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:49	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B15 (24-30)

Lab Sample ID: 500-174404-6

Date Collected: 12/03/19 10:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:13	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:50	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B07 (0-6)

Lab Sample ID: 500-174404-7

Date Collected: 12/03/19 10:50

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 20:06	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:27	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 21:05	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884		MTB	TAL CHI
					(Start)	12/05/19 13:40		
					(End)	12/05/19 13:46		
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B07 (0-6)

Lab Sample ID: 500-174404-7

Date Collected: 12/03/19 10:50

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 19:20	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:16	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 17:07	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:54	EEN	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:52	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B07 (6-12)

Lab Sample ID: 500-174404-8

Date Collected: 12/03/19 11:00

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 20:10	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:32	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 21:08	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:53	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884	(Start) 12/05/19 13:46 (End) 12/05/19 13:53	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B07 (6-12)

Lab Sample ID: 500-174404-8

Date Collected: 12/03/19 11:00

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 15:59	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:37	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 17:30	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:44	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 05:58	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:17	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:54	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B07 (12-18)

Lab Sample ID: 500-174404-9

Date Collected: 12/03/19 11:10

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 20:14	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:36	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B07 (12-18)

Lab Sample ID: 500-174404-9

Date Collected: 12/03/19 11:10

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 21:12	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:55	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884		MTB	TAL CHI
					(Start)	12/05/19 13:53		
					(End)	12/05/19 14:00		
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B07 (12-18)

Lab Sample ID: 500-174404-9

Date Collected: 12/03/19 11:10

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 16:24	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:37	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 17:53	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:48	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 06:02	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:22	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:56	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B07 (18-24)

Lab Sample ID: 500-174404-10

Date Collected: 12/03/19 11:20

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 20:18	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:40	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 21:15	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 10:57	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B07 (18-24)

Lab Sample ID: 500-174404-10

Date Collected: 12/03/19 11:20

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	518884		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Client Sample ID: 2615V2-AI-B07 (18-24)

Lab Sample ID: 500-174404-10

Date Collected: 12/03/19 11:20

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 16:50	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:37	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 18:16	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:52	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 06:06	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:26	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 08:58	MJG	TAL CHI

Client Sample ID: 2615V2-AI-B07 (24-30)

Lab Sample ID: 500-174404-11

Date Collected: 12/03/19 11:30

Matrix: Solid

Date Received: 12/03/19 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			519191	12/06/19 12:15	GCA	TAL CHI
SPLP East	Prep	3010A			519342	12/07/19 21:35	BDE	TAL CHI
SPLP East	Analysis	6010B		1	520143	12/11/19 20:34	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6010B		1	519679	12/09/19 21:45	JEF	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	3010A			519242	12/06/19 15:42	BDE	TAL CHI
TCLP	Analysis	6020A		1	519765	12/09/19 21:18	FXG	TAL CHI
TCLP	Leach	1311			518979	12/05/19 11:55	BEC	TAL CHI
TCLP	Prep	7470A			519855	12/10/19 16:35	MJG	TAL CHI
TCLP	Analysis	7470A		1	520015	12/11/19 11:01	MJG	TAL CHI
Total/NA	Analysis	9045D		1	518884		MTB	TAL CHI
					(Start)	12/05/19 14:07		
					(End)	12/05/19 14:14		
Total/NA	Analysis	Moisture		1	518912	12/05/19 11:55	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Client Sample ID: 2615V2-AI-B07 (24-30)

Lab Sample ID: 500-174404-11

Date Collected: 12/03/19 11:30

Matrix: Solid

Date Received: 12/03/19 13:25

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			519655	12/03/19 17:36	WRE	TAL CHI
Total/NA	Analysis	8260B		1	519967	12/11/19 17:15	PMF	TAL CHI
Total/NA	Prep	3541			520063	12/11/19 15:37	JP1	TAL CHI
Total/NA	Analysis	8270D		1	520289	12/12/19 18:39	AJD	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	520143	12/11/19 16:56	JEF	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		1	519918	12/11/19 06:10	EEN	TAL CHI
Total/NA	Prep	3050B			519276	12/06/19 17:30	BDE	TAL CHI
Total/NA	Analysis	6010B		10	520145	12/11/19 15:30	JEF	TAL CHI
Total/NA	Prep	7471B			519936	12/11/19 12:45	MJG	TAL CHI
Total/NA	Analysis	7471B		1	520265	12/12/19 09:07	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174404-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-174404 COC

Report To (optional)
Contact: D. Tiebout
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job # 500-174404
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 7.1, 7.0

Client		Client Project #		Preservative		Parameter												Preservative Key	
<u>E & E</u>		<u>1009341.0447.01</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM										Comments	
<u>176-001-WOODTE</u>		<u>Chicago IL</u>				<u>B McHenry</u>		<u>R Wright</u>											
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	TOTAL/ TCLP Metals	pH	Percent Solids								
			Date	Time															
<u>1</u>		<u>2615VZ-AI-B15(0-6)</u>	<u>12/3/19</u>	<u>0930</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>2</u>		<u>2615VZ-AI-B15(6-12)</u>	<u>12/3/19</u>	<u>0940</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>3</u>		<u>2615VZ-AI-B15(12-18)</u>	<u>12/3/19</u>	<u>0950</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>4</u>		<u>2615VZ-AI-B15(18-24)-Dup</u>	<u>12/3/19</u>	<u>1000</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>5</u>		<u>2615VZ-AI-B15(18-24)</u>	<u>12/3/19</u>	<u>1010</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>6</u>		<u>2615VZ-AI-B15(24-30)</u>	<u>12/3/19</u>	<u>1020</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>7</u>		<u>2615VZ-AI-B07(0-6)</u>	<u>12/3/19</u>	<u>1050</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>8</u>		<u>2615VZ-AI-B07(6-12)</u>	<u>12/3/19</u>	<u>1100</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>9</u>		<u>2615VZ-AI-B07(12-18)</u>	<u>12/3/19</u>	<u>1110</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>10</u>		<u>2615VZ-AI-B07(18-24)</u>	<u>12/3/19</u>	<u>1120</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days ___ Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company <u>E & E</u> Date <u>12/3/19</u> Time <u>1200</u>	Received By <u>[Signature]</u> Company <u>TA</u> Date <u>12/3/19</u> Time <u>1228</u>	Lab Courier <u>[Signature]</u>
Relinquished By <u>[Signature]</u> Company <u>TA</u> Date <u>12/3/19</u> Time <u>1325</u>	Received By <u>[Signature]</u> Company <u>TA-CRI</u> Date <u>12/3/19</u> Time <u>1325</u>	Shipped _____
Relinquished By _____ Company _____ Date _____ Time _____	Received By _____ Company _____ Date _____ Time _____	Hand Delivered _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: D. Tiebout
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: _____
Company: _____
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174404
Chain of Custody Number: _____
Page _____ of 7.1.7.0
Temperature °C of Cooler: 7.1.7.0

Client		Client Project #		Preservative		Parameter												Preservative Key	
<u>E&E</u>		<u>100934.0447.01</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Project Location/State		Lab Project #		Lab PM													
<u>176-001-W0047E</u>		<u>Chicago IL</u>				<u>R Wright</u>													
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix											Comments	
				Date	Time														
<u>11</u>		<u>2615VZ-AI-B07 (24-30)</u>		<u>12/3/19</u>	<u>1130</u>	<u>2</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>						

Turnaround Time Required (Business Days) _____ 1 Day _____ 2 Days _____ 5 Days _____ 7 Days 10 Days _____ 15 Days _____ Other _____
Requested Due Date _____

Sample Disposal Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company <u>E&E</u> Date <u>12/3/19</u> Time <u>1200</u>	Received By <u>[Signature]</u> Company <u>TA</u> Date <u>12/3/19</u> Time <u>1200</u>	Lab Courier <u>TA</u>
Relinquished By <u>[Signature]</u> Company <u>TA</u> Date <u>12/3/19</u> Time <u>1335</u>	Received By <u>[Signature]</u> Company <u>TA-CHE</u> Date <u>12/3/19</u> Time <u>1325</u>	Shipped _____
Relinquished By _____ Company _____ Date _____ Time _____	Received By _____ Company _____ Date _____ Time _____	Hand Delivered _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174404-1

Login Number: 174404

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	7.1,7.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174842-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/27/2019 11:26:48 AM

Richard Wright, Senior Project Manager
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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Job ID: 500-174842-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174842-1

Receipt

The samples were received on 12/10/2019 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 4.6° C.

GC/MS VOA

Method 8260B: One Surrogate (Dibromofluoromethane) recovery for the following sample was outside control limits: 2615V2-01-B50 (0-5) (500-174842-1). Evidence of matrix interference is present due to the basic pH 11 of the sample; therefore, no re-analysis was not performed.

Method 8260B: Internal standard (1,4-Dichlorobenzene-d4) response was outside of acceptance limits for the following sample: 2615V2-01-B50 (31-39) (500-174842-6). The sample had non-detect for associated analytes for this Internal standard: therefore the results were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following samples contained one surrogate outside acceptance limits: 2615V2-01-B50 (0-5) (500-174842-1), 2615V2-01-B50 (39-47) (500-174842-7) and 2615V2-01-B57 (5-10) (500-174842-9). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 521361 had 3 analytes outside control limits: N-Nitrosodiphenylamine, Dibenz(a,h)anthracene and Anthracene. These results have been reported and qualified. (LCS 500-521361/2-A)

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-174842-E-2-C MS) and (500-174842-E-2-D MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The method blank for preparation batch 500-520763 and analytical batch 500-521152 contained Potassium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

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Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.49		0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.19		0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.028	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.34		0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.33		0.19	0.045	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.42		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.81	*	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Carbazole	0.54		0.19	0.095	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.12	J	0.19	0.070	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene - DL	3.4		0.076	0.011	mg/Kg	2	☼	8270D	Total/NA
Fluoranthene - DL	4.1		0.076	0.014	mg/Kg	2	☼	8270D	Total/NA
Pyrene - DL	3.4		0.076	0.015	mg/Kg	2	☼	8270D	Total/NA
Benzo[a]anthracene - DL	1.6		0.076	0.010	mg/Kg	2	☼	8270D	Total/NA
Chrysene - DL	1.6		0.076	0.021	mg/Kg	2	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	2.0		0.076	0.016	mg/Kg	2	☼	8270D	Total/NA
Benzo[k]fluoranthene - DL	0.80		0.076	0.022	mg/Kg	2	☼	8270D	Total/NA
Benzo[a]pyrene - DL	1.4		0.076	0.015	mg/Kg	2	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene - DL	0.46		0.076	0.020	mg/Kg	2	☼	8270D	Total/NA
Dibenz(a,h)anthracene - DL	0.18	*	0.076	0.015	mg/Kg	2	☼	8270D	Total/NA
Benzo[g,h,i]perylene - DL	0.51		0.076	0.025	mg/Kg	2	☼	8270D	Total/NA
Arsenic	4.9		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	16	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (0-5) (Continued)

Lab Sample ID: 500-174842-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.35	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	68000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.9		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	34		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2800	B	28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.65		0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	330	B	56	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.63		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	100	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.60		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.048	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.032		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.035	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.019	J	0.040	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.15		0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.031	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.037	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.1		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.79		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	30000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	4000	B	30	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	290	B	59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (5-10) (Continued)

Lab Sample ID: 500-174842-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	48	B	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.20	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.088	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.055		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.034		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0074	J	0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.035		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.051	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.015	J	0.041	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.024	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.0		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.62	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73		0.25	0.058	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.62	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.31	0.081	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.62	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	6.2	3.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.62	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3900	B	31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.57	J	0.62	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	260	B	62	9.1	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.62	0.31	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.31	0.073	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B	1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.50		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.33	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.023	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.010	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0078	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.061	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.029	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.024	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.73		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	450		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	32		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3700	B	29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	220	B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.86		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B	1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.096	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.034	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.056		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0094	J	0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.026	J	0.083	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.058		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.3		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	48000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	6.0	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (23-31) (Continued)

Lab Sample ID: 500-174842-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	12		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	32		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	4000	B	29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.59		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	230	B	57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	53	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.081	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.072	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.18		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.012	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0080	J	0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.024	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.051		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.015	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.4		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	42		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	49000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	3800	B	28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.53	J	0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	230	B	56	8.3	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	47	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.66		0.50	0.050	mg/L	1		6010B	TCLP
Boron	1.3		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (31-39) (Continued)

Lab Sample ID: 500-174842-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.11	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.027		0.016	0.0068	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.0097	J	0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.039		0.039	0.0070	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.18		0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.033	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	12		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	16		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.31		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	9.1	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	68000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	7.9		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	37		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	34000	B	5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	27		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600	B	29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.1		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	160	B	58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	42	B	1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	1.2	F1	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.074		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.25	J F1 B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.013	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.020		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174842-8	2615V2-01-B57 (0-5)	Solid	12/10/19 11:45	12/10/19 15:25	
500-174842-9	2615V2-01-B57 (5-10)	Solid	12/10/19 11:50	12/10/19 15:25	
500-174842-10	2615V2-01-B57 (10-15)	Solid	12/10/19 12:00	12/10/19 15:25	
500-174842-11	2615V2-01-B57 (15-23)	Solid	12/10/19 12:05	12/10/19 15:25	
500-174842-12	2615V2-01-B57 (23-31)	Solid	12/10/19 12:15	12/10/19 15:25	
500-174842-13	2615V2-01-B57 (31-39)	Solid	12/10/19 12:25	12/10/19 15:25	
500-174842-14	2615V2-01-B57 (39-47)	Solid	12/10/19 12:35	12/10/19 15:25	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Carbon disulfide	<0.0046		0.0046	0.00097	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 03:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	12/11/19 19:47	12/20/19 03:05	1
4-Bromofluorobenzene (Surr)	100		75 - 131	12/11/19 19:47	12/20/19 03:05	1
Dibromofluoromethane	90		75 - 126	12/11/19 19:47	12/20/19 03:05	1
Toluene-d8 (Surr)	89		75 - 124	12/11/19 19:47	12/20/19 03:05	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 85.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Naphthalene	0.49		0.038	0.0059	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2-Methylnaphthalene	0.19		0.077	0.0070	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Acenaphthylene	0.028 J		0.038	0.0050	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Acenaphthene	0.34		0.038	0.0068	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Dibenzofuran	0.33		0.19	0.045	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Fluorene	0.42		0.038	0.0054	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
N-Nitrosodiphenylamine	<0.19 *		0.19	0.045	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Anthracene	0.81 *		0.038	0.0064	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Carbazole	0.54		0.19	0.095	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Bis(2-ethylhexyl) phthalate	0.12 J		0.19	0.070	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:35	12/21/19 01:12	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 85.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		31 - 166	12/18/19 16:35	12/21/19 01:12	1
Phenol-d5	94		30 - 153	12/18/19 16:35	12/21/19 01:12	1
Nitrobenzene-d5	85		37 - 147	12/18/19 16:35	12/21/19 01:12	1
2-Fluorobiphenyl	104		43 - 145	12/18/19 16:35	12/21/19 01:12	1
2,4,6-Tribromophenol	50		31 - 143	12/18/19 16:35	12/21/19 01:12	1
Terphenyl-d14	116		42 - 157	12/18/19 16:35	12/21/19 01:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	3.4		0.076	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Fluoranthene	4.1		0.076	0.014	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Pyrene	3.4		0.076	0.015	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Benzo[a]anthracene	1.6		0.076	0.010	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Chrysene	1.6		0.076	0.021	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Benzo[b]fluoranthene	2.0		0.076	0.016	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Benzo[k]fluoranthene	0.80		0.076	0.022	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Benzo[a]pyrene	1.4		0.076	0.015	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Indeno[1,2,3-cd]pyrene	0.46		0.076	0.020	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Dibenz(a,h)anthracene	0.18	*	0.076	0.015	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2
Benzo[g,h,i]perylene	0.51		0.076	0.025	mg/Kg	☼	12/18/19 16:35	12/24/19 14:34	2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Arsenic	4.9		0.56	0.19	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Barium	64		0.56	0.064	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Beryllium	0.65		0.23	0.053	mg/Kg	☼	12/16/19 08:32	12/18/19 22:48	1
Boron	16	B	2.8	0.26	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Cadmium	0.35	B	0.11	0.020	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Calcium	68000	B	110	19	mg/Kg	☼	12/16/19 08:32	12/18/19 22:53	10
Chromium	18		0.56	0.28	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Cobalt	8.9		0.28	0.074	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Copper	34		0.56	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Iron	15000		11	5.9	mg/Kg	☼	12/16/19 08:32	12/18/19 22:48	1
Lead	42		0.28	0.13	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Magnesium	33000	B	5.6	2.8	mg/Kg	☼	12/16/19 08:32	12/18/19 22:48	1
Manganese	280		0.56	0.082	mg/Kg	☼	12/16/19 08:32	12/18/19 22:48	1
Nickel	24		0.56	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Potassium	2800	B	28	10	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Selenium	0.65		0.56	0.33	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Silver	1.8		0.28	0.073	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Sodium	330	B	56	8.4	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Thallium	0.63		0.56	0.28	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Vanadium	18		0.28	0.067	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1
Zinc	100	B	1.1	0.50	mg/Kg	☼	12/16/19 08:32	12/17/19 17:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:15	1
Boron	0.072	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 85.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:15	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:15	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:15	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:15	1
Manganese	0.60		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:15	1
Nickel	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:15	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:15	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:15	1
Zinc	0.048	J B	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 15:30	12/26/19 10:49	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 13:50	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 13:50	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.018	0.0059	mg/Kg	☼	12/17/19 14:35	12/18/19 07:50	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	12/11/19 19:47	12/20/19 03:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	12/11/19 19:47	12/20/19 03:30	1
4-Bromofluorobenzene (Surr)	99		75 - 131	12/11/19 19:47	12/20/19 03:30	1
Dibromofluoromethane	87		75 - 126	12/11/19 19:47	12/20/19 03:30	1
Toluene-d8 (Surr)	94		75 - 124	12/11/19 19:47	12/20/19 03:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Nitrobenzene	<0.040		0.040	0.0099	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2-Methylnaphthalene	0.035	J	0.080	0.0073	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Acenaphthylene	<0.040		0.040	0.0052	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Acenaphthene	0.019	J	0.040	0.0072	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Phenanthrene	0.15		0.040	0.0055	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Anthracene	<0.040	*	0.040	0.0067	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Pyrene	0.031	J	0.040	0.0079	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.037	J	0.040	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Dibenz(a,h)anthracene	<0.040	*	0.040	0.0077	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/18/19 16:35	12/24/19 15:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	153		31 - 166				12/18/19 16:35	12/24/19 15:04	1
Phenol-d5	120		30 - 153				12/18/19 16:35	12/24/19 15:04	1
Nitrobenzene-d5	105		37 - 147				12/18/19 16:35	12/24/19 15:04	1
2-Fluorobiphenyl	111		43 - 145				12/18/19 16:35	12/24/19 15:04	1
2,4,6-Tribromophenol	79		31 - 143				12/18/19 16:35	12/24/19 15:04	1
Terphenyl-d14	162	X	42 - 157				12/18/19 16:35	12/24/19 15:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Arsenic	6.1		0.59	0.20	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Barium	41		0.59	0.067	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Beryllium	0.79		0.24	0.055	mg/Kg	☼	12/16/19 08:32	12/18/19 22:57	1
Boron	17	B	3.0	0.28	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Cadmium	0.14	B	0.12	0.021	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Calcium	30000	B	12	2.0	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Chromium	18		0.59	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Cobalt	13		0.30	0.077	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Copper	24		0.59	0.17	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Iron	19000		12	6.1	mg/Kg	☼	12/16/19 08:32	12/18/19 22:57	1
Lead	12		0.30	0.14	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Magnesium	21000	B	5.9	2.9	mg/Kg	☼	12/16/19 08:32	12/18/19 22:57	1
Manganese	300		0.59	0.086	mg/Kg	☼	12/16/19 08:32	12/18/19 22:57	1
Nickel	35		0.59	0.17	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Potassium	4000	B	30	10	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Selenium	0.63		0.59	0.35	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Silver	2.2		0.30	0.076	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Sodium	290	B	59	8.8	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Thallium	1.1		0.59	0.30	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Vanadium	20		0.30	0.070	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1
Zinc	48	B	1.2	0.52	mg/Kg	☼	12/16/19 08:32	12/17/19 17:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.20	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:19	1
Boron	0.088	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:19	1
Cobalt	0.028		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:19	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:19	1
Manganese	1.6		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:19	1
Nickel	0.055		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:19	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:19	1
Zinc	0.024	J B	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:19	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.034		0.025	0.010	mg/L		12/24/19 15:30	12/26/19 10:53	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 13:52	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 13:52	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0074	J	0.019	0.0065	mg/Kg	☼	12/17/19 14:35	12/18/19 07:53	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Acetone	0.035		0.017	0.0076	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 03:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	12/11/19 19:47	12/20/19 03:55	1
4-Bromofluorobenzene (Surr)	88		75 - 131	12/11/19 19:47	12/20/19 03:55	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/20/19 03:55	1
Toluene-d8 (Surr)	97		75 - 124	12/11/19 19:47	12/20/19 03:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2-Methylnaphthalene	0.051	J	0.083	0.0076	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Acenaphthene	0.015	J	0.041	0.0074	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
N-Nitrosodiphenylamine	<0.21	*	0.21	0.049	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Phenanthrene	0.11		0.041	0.0058	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Anthracene	<0.041	*	0.041	0.0069	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Pyrene	0.024	J	0.041	0.0082	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Dibenz(a,h)anthracene	<0.041	*	0.041	0.0080	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
Benzo[g,h,i]perylene	0.020	J	0.041	0.013	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:35	12/24/19 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	145		31 - 166	12/18/19 16:35	12/24/19 15:34	1
Phenol-d5	111		30 - 153	12/18/19 16:35	12/24/19 15:34	1
Nitrobenzene-d5	103		37 - 147	12/18/19 16:35	12/24/19 15:34	1
2-Fluorobiphenyl	104		43 - 145	12/18/19 16:35	12/24/19 15:34	1
2,4,6-Tribromophenol	63		31 - 143	12/18/19 16:35	12/24/19 15:34	1
Terphenyl-d14	149		42 - 157	12/18/19 16:35	12/24/19 15:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Arsenic	7.0		0.62	0.21	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Barium	43		0.62	0.070	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Beryllium	0.73		0.25	0.058	mg/Kg	☼	12/16/19 08:32	12/18/19 23:01	1
Boron	19	B	3.1	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Cadmium	0.18	B	0.12	0.022	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Calcium	52000	B	120	21	mg/Kg	☼	12/16/19 08:32	12/18/19 23:05	10
Chromium	17		0.62	0.30	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Cobalt	12		0.31	0.081	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Copper	25		0.62	0.17	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Iron	19000		12	6.4	mg/Kg	☼	12/16/19 08:32	12/18/19 23:01	1
Lead	12		0.31	0.14	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Magnesium	22000	B	6.2	3.1	mg/Kg	☼	12/16/19 08:32	12/18/19 23:01	1
Manganese	320		0.62	0.089	mg/Kg	☼	12/16/19 08:32	12/18/19 23:01	1
Nickel	31		0.62	0.18	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Potassium	3900	B	31	11	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Selenium	0.57	J	0.62	0.36	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Silver	2.1		0.31	0.079	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Sodium	260	B	62	9.1	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Thallium	0.89		0.62	0.31	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Vanadium	21		0.31	0.073	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1
Zinc	48	B	1.2	0.54	mg/Kg	☼	12/16/19 08:32	12/17/19 17:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:23	1
Boron	0.073	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:23	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:23	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:23	1
Cobalt	0.011	J	0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:23	1
Iron	0.33	J	0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:23	1
Manganese	1.3		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:23	1
Nickel	0.030		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:23	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:23	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:23	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:23	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.023	J	0.025	0.010	mg/L		12/24/19 15:30	12/26/19 10:57	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 13:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 13:54	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.020	0.0065	mg/Kg	☼	12/17/19 14:35	12/18/19 08:01	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Acetone	0.0078	J	0.017	0.0076	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/11/19 19:47	12/20/19 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 134	12/11/19 19:47	12/20/19 04:21	1
4-Bromofluorobenzene (Surr)	105		75 - 131	12/11/19 19:47	12/20/19 04:21	1
Dibromofluoromethane	96		75 - 126	12/11/19 19:47	12/20/19 04:21	1
Toluene-d8 (Surr)	88		75 - 124	12/11/19 19:47	12/20/19 04:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2-Methylnaphthalene	0.061	J	0.083	0.0076	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
N-Nitrosodiphenylamine	<0.21	*	0.21	0.049	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Phenanthrene	0.13		0.041	0.0057	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Anthracene	<0.041	*	0.041	0.0069	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Pyrene	0.029	J	0.041	0.0082	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.024	J	0.041	0.011	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Dibenz(a,h)anthracene	<0.041	*	0.041	0.0080	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:35	12/21/19 02:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	115		31 - 166				12/18/19 16:35	12/21/19 02:40	1
Phenol-d5	99		30 - 153				12/18/19 16:35	12/21/19 02:40	1
Nitrobenzene-d5	86		37 - 147				12/18/19 16:35	12/21/19 02:40	1
2-Fluorobiphenyl	105		43 - 145				12/18/19 16:35	12/21/19 02:40	1
2,4,6-Tribromophenol	60		31 - 143				12/18/19 16:35	12/21/19 02:40	1
Terphenyl-d14	128		42 - 157				12/18/19 16:35	12/21/19 02:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Arsenic	6.9		0.58	0.20	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Barium	40		0.58	0.066	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Beryllium	0.73		0.23	0.054	mg/Kg	☼	12/16/19 08:32	12/18/19 23:18	1
Boron	18	B	2.9	0.27	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Cadmium	0.13	B	0.12	0.021	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Calcium	57000	B	120	20	mg/Kg	☼	12/16/19 08:32	12/18/19 23:22	10
Chromium	17		0.58	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Cobalt	12		0.29	0.076	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Copper	26		0.58	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Iron	20000		12	6.0	mg/Kg	☼	12/16/19 08:32	12/18/19 23:18	1
Lead	12		0.29	0.13	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Magnesium	25000	B	5.8	2.9	mg/Kg	☼	12/16/19 08:32	12/18/19 23:18	1
Manganese	450		0.58	0.084	mg/Kg	☼	12/16/19 08:32	12/18/19 23:18	1
Nickel	32		0.58	0.17	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Potassium	3700	B	29	10	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Selenium	0.48	J	0.58	0.34	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Silver	1.9		0.29	0.075	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Sodium	220	B	58	8.6	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Thallium	0.86		0.58	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Vanadium	20		0.29	0.068	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1
Zinc	48	B	1.2	0.51	mg/Kg	☼	12/16/19 08:32	12/17/19 17:43	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.48	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:28	1
Boron	0.096	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:28	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:28	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:28	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:28	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:28	1
Manganese	1.3		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:28	1
Nickel	0.020	J	0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:28	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:28	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:28	1
Zinc	0.034	J B	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:28	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.056		0.025	0.010	mg/L		12/24/19 15:30	12/26/19 11:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 13:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 13:56	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.020	0.0067	mg/Kg	☼	12/17/19 14:35	12/18/19 08:03	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Acetone	0.0094	J	0.017	0.0074	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 04:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 134	12/11/19 19:47	12/20/19 04:46	1
4-Bromofluorobenzene (Surr)	107		75 - 131	12/11/19 19:47	12/20/19 04:46	1
Dibromofluoromethane	94		75 - 126	12/11/19 19:47	12/20/19 04:46	1
Toluene-d8 (Surr)	93		75 - 124	12/11/19 19:47	12/20/19 04:46	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2-Methylnaphthalene	0.026	J	0.083	0.0075	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
N-Nitrosodiphenylamine	<0.21	*	0.21	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Phenanthrene	0.058		0.041	0.0057	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Anthracene	<0.041	*	0.041	0.0068	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Pyrene	0.012	J	0.041	0.0081	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Dibenz(a,h)anthracene	<0.041	*	0.041	0.0079	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/18/19 16:35	12/24/19 11:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	57		31 - 166				12/18/19 16:35	12/24/19 11:37	1
Phenol-d5	100		30 - 153				12/18/19 16:35	12/24/19 11:37	1
Nitrobenzene-d5	102		37 - 147				12/18/19 16:35	12/24/19 11:37	1
2-Fluorobiphenyl	99		43 - 145				12/18/19 16:35	12/24/19 11:37	1
2,4,6-Tribromophenol	62		31 - 143				12/18/19 16:35	12/24/19 11:37	1
Terphenyl-d14	133		42 - 157				12/18/19 16:35	12/24/19 11:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Arsenic	7.3		0.57	0.20	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Barium	44		0.57	0.065	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Beryllium	0.67		0.23	0.054	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Boron	19 B		2.9	0.27	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Cadmium	0.19 B		0.11	0.021	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Calcium	48000 B		110	19	mg/Kg	☼	12/16/19 08:32	12/18/19 23:30	10
Chromium	16		0.57	0.28	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Cobalt	12		0.29	0.075	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Copper	27		0.57	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Iron	19000		11	6.0	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Lead	12		0.29	0.13	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Magnesium	22000 B		5.7	2.8	mg/Kg	☼	12/16/19 08:32	12/18/19 23:26	1
Manganese	310		0.57	0.083	mg/Kg	☼	12/16/19 08:32	12/18/19 23:26	1
Nickel	32		0.57	0.17	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Potassium	4000 B		29	10	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Selenium	0.59		0.57	0.34	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Silver	2.0		0.29	0.074	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Sodium	230 B		57	8.5	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Thallium	1.0		0.57	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Vanadium	21		0.29	0.068	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1
Zinc	53 B		1.1	0.50	mg/Kg	☼	12/16/19 08:32	12/17/19 17:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49 J		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:32	1
Boron	0.081 J		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:32	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:32	1
Manganese	1.4		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:32	1
Nickel	0.020	J	0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:32	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:32	1
Zinc	0.072	J B	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.18		0.025	0.010	mg/L		12/24/19 15:30	12/26/19 11:14	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 14:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 14:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.020	0.0065	mg/Kg	☼	12/17/19 14:35	12/18/19 08:05	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Acetone	0.0080	J	0.017	0.0074	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/20/19 05:11	1
4-Bromofluorobenzene (Surr)	94		75 - 131	12/11/19 19:47	12/20/19 05:11	1
Dibromofluoromethane	87		75 - 126	12/11/19 19:47	12/20/19 05:11	1
Toluene-d8 (Surr)	105		75 - 124	12/11/19 19:47	12/20/19 05:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2-Methylnaphthalene	0.024	J	0.081	0.0074	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Phenanthrene	0.051		0.040	0.0056	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Anthracene	<0.040	*	0.040	0.0067	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Pyrene	0.012	J	0.040	0.0079	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.015	J	0.040	0.011	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Dibenz(a,h)anthracene	<0.040	*	0.040	0.0077	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/18/19 16:35	12/24/19 12:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	136		31 - 166				12/18/19 16:35	12/24/19 12:06	1
Phenol-d5	104		30 - 153				12/18/19 16:35	12/24/19 12:06	1
Nitrobenzene-d5	99		37 - 147				12/18/19 16:35	12/24/19 12:06	1
2-Fluorobiphenyl	104		43 - 145				12/18/19 16:35	12/24/19 12:06	1
2,4,6-Tribromophenol	72		31 - 143				12/18/19 16:35	12/24/19 12:06	1
Terphenyl-d14	143		42 - 157				12/18/19 16:35	12/24/19 12:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Arsenic	6.4		0.56	0.19	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Barium	42		0.56	0.064	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Beryllium	0.66		0.22	0.052	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Boron	19	B	2.8	0.26	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Cadmium	0.13	B	0.11	0.020	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Calcium	49000	B	110	19	mg/Kg	☼	12/16/19 08:32	12/18/19 23:39	10
Chromium	16		0.56	0.28	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Cobalt	12		0.28	0.073	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Copper	25		0.56	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Iron	17000		11	5.8	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Lead	12		0.28	0.13	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Magnesium	22000	B	5.6	2.8	mg/Kg	☼	12/16/19 08:32	12/18/19 23:35	1
Manganese	320		0.56	0.081	mg/Kg	☼	12/16/19 08:32	12/18/19 23:35	1
Nickel	31		0.56	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Potassium	3800	B	28	9.9	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Selenium	0.53	J	0.56	0.33	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Silver	2.0		0.28	0.072	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Sodium	230	B	56	8.3	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Thallium	1.0		0.56	0.28	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Vanadium	20		0.28	0.066	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1
Zinc	47	B	1.1	0.49	mg/Kg	☼	12/16/19 08:32	12/17/19 17:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.66		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:36	1
Boron	1.3		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:36	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:36	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:36	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:36	1
Manganese	1.6		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:36	1
Nickel	0.026		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:36	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:36	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:36	1
Zinc	0.11	J B	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:36	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.19		0.025	0.010	mg/L		12/24/19 15:30	12/26/19 11:18	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 14:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 14:06	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.019	0.0065	mg/Kg	☼	12/17/19 14:35	12/18/19 08:12	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Acetone	0.027		0.016	0.0068	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/11/19 19:47	12/20/19 05:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	12/11/19 19:47	12/20/19 05:37	1
4-Bromofluorobenzene (Surr)	103		75 - 131	12/11/19 19:47	12/20/19 05:37	1
Dibromofluoromethane	88		75 - 126	12/11/19 19:47	12/20/19 05:37	1
Toluene-d8 (Surr)	84		75 - 124	12/11/19 19:47	12/20/19 05:37	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2-Methylnaphthalene	0.0097	J	0.079	0.0072	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Acenaphthene	0.039		0.039	0.0070	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
N-Nitrosodiphenylamine	<0.20	*	0.20	0.046	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Phenanthrene	0.18		0.039	0.0054	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Anthracene	<0.039	*	0.039	0.0065	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Pyrene	0.033	J	0.039	0.0078	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Benzof[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.018	J	0.039	0.011	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Dibenz(a,h)anthracene	<0.039	*	0.039	0.0075	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:35	12/21/19 04:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		31 - 166				12/18/19 16:35	12/21/19 04:09	1
Phenol-d5	91		30 - 153				12/18/19 16:35	12/21/19 04:09	1
Nitrobenzene-d5	81		37 - 147				12/18/19 16:35	12/21/19 04:09	1
2-Fluorobiphenyl	97		43 - 145				12/18/19 16:35	12/21/19 04:09	1
2,4,6-Tribromophenol	55		31 - 143				12/18/19 16:35	12/21/19 04:09	1
Terphenyl-d14	120		42 - 157				12/18/19 16:35	12/21/19 04:09	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Arsenic	12		0.58	0.20	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Barium	16		0.58	0.066	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Beryllium	0.31		0.23	0.054	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Boron	9.1	B	2.9	0.27	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Cadmium	0.24	B	0.12	0.021	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Calcium	68000	B	120	20	mg/Kg	☼	12/16/19 08:32	12/18/19 23:47	10
Chromium	7.9		0.58	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Cobalt	12		0.29	0.076	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Copper	37		0.58	0.16	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Iron	17000		12	6.0	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Lead	17		0.29	0.13	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Magnesium	34000	B	5.8	2.9	mg/Kg	☼	12/16/19 08:32	12/18/19 23:43	1
Manganese	440		0.58	0.084	mg/Kg	☼	12/16/19 08:32	12/18/19 23:43	1
Nickel	27		0.58	0.17	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Potassium	1600	B	29	10	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Selenium	0.66		0.58	0.34	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Silver	1.1		0.29	0.075	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Sodium	160	B	58	8.6	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Thallium	1.2		0.58	0.29	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Vanadium	11		0.29	0.068	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1
Zinc	42	B	1.2	0.51	mg/Kg	☼	12/16/19 08:32	12/17/19 18:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32	J	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 21:41	1
Boron	1.2	F1	0.50	0.050	mg/L		12/24/19 06:22	12/24/19 21:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 21:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:41	1
Cobalt	0.039		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:41	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 21:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 21:41	1
Manganese	1.9		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:41	1
Nickel	0.074		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 21:41	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 21:41	1
Zinc	0.25	J F1 B	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 21:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.013	J	0.025	0.010	mg/L		12/24/19 15:30	12/26/19 11:22	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 14:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 14:08	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.019	0.0063	mg/Kg	☼	12/17/19 14:35	12/18/19 08:14	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

GC/MS VOA

Prep Batch: 520642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	5035	
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	5035	
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	5035	
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	5035	
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	5035	
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	5035	
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	5035	
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	5035	
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	5035	
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	5035	
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	5035	
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	5035	
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	5035	
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	5035	

Analysis Batch: 521534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	8260B	520642
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	8260B	520642
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	8260B	520642
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	8260B	520642
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	8260B	520642
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	8260B	520642
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	8260B	520642
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	8260B	520642
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	8260B	520642
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	8260B	520642
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	8260B	520642
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	8260B	520642
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	8260B	520642
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	8260B	520642
MB 500-521534/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-521534/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-521534/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 521361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	3541	
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	3541	
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	3541	
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	3541	
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	3541	
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	3541	
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	3541	
500-174842-8 - DL	2615V2-01-B57 (0-5)	Total/NA	Solid	3541	
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	3541	
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	3541	
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	3541	
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

GC/MS Semi VOA (Continued)

Prep Batch: 521361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	3541	
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	3541	
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	3541	
MB 500-521361/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-521361/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-174842-2 MS	2615V2-01-B50 (5-10)	Total/NA	Solid	3541	
500-174842-2 MSD	2615V2-01-B50 (5-10)	Total/NA	Solid	3541	

Analysis Batch: 521499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521361/1-A	Method Blank	Total/NA	Solid	8270D	521361
LCS 500-521361/2-A	Lab Control Sample	Total/NA	Solid	8270D	521361

Analysis Batch: 521795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	8270D	521361
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	8270D	521361
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	8270D	521361
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	8270D	521361
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	8270D	521361
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	8270D	521361

Analysis Batch: 522273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	8270D	521361
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	8270D	521361
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	8270D	521361
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	8270D	521361
500-174842-8 - DL	2615V2-01-B57 (0-5)	Total/NA	Solid	8270D	521361
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	8270D	521361
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	8270D	521361
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	8270D	521361
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	8270D	521361
500-174842-2 MS	2615V2-01-B50 (5-10)	Total/NA	Solid	8270D	521361
500-174842-2 MSD	2615V2-01-B50 (5-10)	Total/NA	Solid	8270D	521361

Metals

Prep Batch: 520763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	3050B	
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	3050B	
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	3050B	
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	3050B	
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	3050B	
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	3050B	
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	3050B	
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	3050B	
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	3050B	
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	3050B	
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals (Continued)

Prep Batch: 520763 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	3050B	
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	3050B	
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	3050B	
MB 500-520763/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-520763/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-174842-1 MS	2615V2-01-B50 (0-5)	Total/NA	Solid	3050B	
500-174842-1 MSD	2615V2-01-B50 (0-5)	Total/NA	Solid	3050B	
500-174842-1 DU	2615V2-01-B50 (0-5)	Total/NA	Solid	3050B	

Prep Batch: 521060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	7471B	
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	7471B	
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	7471B	
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	7471B	
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	7471B	
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	7471B	
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	7471B	
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	7471B	
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	7471B	
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	7471B	
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	7471B	
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	7471B	
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	7471B	
MB 500-521060/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521060/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174842-9 MS	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	
500-174842-9 MSD	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	
500-174842-9 DU	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	

Analysis Batch: 521152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	6010B	520763
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	6010B	520763
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	6010B	520763
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	6010B	520763
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	6010B	520763
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	6010B	520763
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	6010B	520763
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	6010B	520763
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	6010B	520763
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	6010B	520763
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	6010B	520763
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	6010B	520763
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	6010B	520763
MB 500-520763/1-A	Method Blank	Total/NA	Solid	6010B	520763
LCS 500-520763/2-A	Lab Control Sample	Total/NA	Solid	6010B	520763
500-174842-1 MS	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 MSD	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals (Continued)

Analysis Batch: 521152 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1 DU	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763

Analysis Batch: 521278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	7471B	521060
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	7471B	521060
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	7471B	521060
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	7471B	521060
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	7471B	521060
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	7471B	521060
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	7471B	521060
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	7471B	521060
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	521060
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	7471B	521060
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	7471B	521060
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	7471B	521060
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	7471B	521060
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	7471B	521060
MB 500-521060/12-A	Method Blank	Total/NA	Solid	7471B	521060
LCS 500-521060/13-A	Lab Control Sample	Total/NA	Solid	7471B	521060
500-174842-9 MS	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	521060
500-174842-9 MSD	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	521060
500-174842-9 DU	2615V2-01-B57 (5-10)	Total/NA	Solid	7471B	521060

Analysis Batch: 521419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	6010B	520763
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	6010B	520763
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	6010B	520763
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	6010B	520763
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	6010B	520763
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	6010B	520763
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	6010B	520763
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	6010B	520763
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	6010B	520763
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	6010B	520763
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	6010B	520763
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	6010B	520763
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	6010B	520763
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	6010B	520763
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	6010B	520763
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	6010B	520763
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	6010B	520763
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	6010B	520763
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	6010B	520763
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	6010B	520763
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	6010B	520763
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	6010B	520763
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	6010B	520763

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals (Continued)

Analysis Batch: 521419 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	6010B	520763
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	6010B	520763
MB 500-520763/1-A	Method Blank	Total/NA	Solid	6010B	520763
LCS 500-520763/2-A	Lab Control Sample	Total/NA	Solid	6010B	520763
500-174842-1 MS	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 MS	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 MSD	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 MSD	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 DU	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 DU	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763

Leach Batch: 521521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	TCLP	Solid	1311	
500-174842-2	2615V2-01-B50 (5-10)	TCLP	Solid	1311	
500-174842-3	2615V2-01-B50 (10-15)	TCLP	Solid	1311	
500-174842-4	2615V2-01-B50 (15-23)	TCLP	Solid	1311	
500-174842-5	2615V2-01-B50 (23-31)	TCLP	Solid	1311	
500-174842-6	2615V2-01-B50 (31-39)	TCLP	Solid	1311	
500-174842-7	2615V2-01-B50 (39-47)	TCLP	Solid	1311	
500-174842-8	2615V2-01-B57 (0-5)	TCLP	Solid	1311	
500-174842-9	2615V2-01-B57 (5-10)	TCLP	Solid	1311	
500-174842-10	2615V2-01-B57 (10-15)	TCLP	Solid	1311	
500-174842-11	2615V2-01-B57 (15-23)	TCLP	Solid	1311	
500-174842-12	2615V2-01-B57 (23-31)	TCLP	Solid	1311	
500-174842-13	2615V2-01-B57 (31-39)	TCLP	Solid	1311	
500-174842-14	2615V2-01-B57 (39-47)	TCLP	Solid	1311	
LB 500-521521/1-B	Method Blank	TCLP	Solid	1311	
LB 500-521521/1-C	Method Blank	TCLP	Solid	1311	
LB 500-521521/1-D	Method Blank	TCLP	Solid	1311	
500-174842-6 MS	2615V2-01-B50 (31-39)	TCLP	Solid	1311	
500-174842-14 MS	2615V2-01-B57 (39-47)	TCLP	Solid	1311	
500-174842-6 DU	2615V2-01-B50 (31-39)	TCLP	Solid	1311	
500-174842-14 DU	2615V2-01-B57 (39-47)	TCLP	Solid	1311	

Analysis Batch: 521531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 MS	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 MSD	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763
500-174842-1 DU	2615V2-01-B50 (0-5)	Total/NA	Solid	6010B	520763

Prep Batch: 522004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	TCLP	Solid	3010A	521521
500-174842-2	2615V2-01-B50 (5-10)	TCLP	Solid	3010A	521521
500-174842-3	2615V2-01-B50 (10-15)	TCLP	Solid	3010A	521521
500-174842-4	2615V2-01-B50 (15-23)	TCLP	Solid	3010A	521521
500-174842-5	2615V2-01-B50 (23-31)	TCLP	Solid	3010A	521521
500-174842-6	2615V2-01-B50 (31-39)	TCLP	Solid	3010A	521521
LB 500-521521/1-B	Method Blank	TCLP	Solid	3010A	521521

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals (Continued)

Prep Batch: 522004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-522004/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Leach Batch: 522172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	SPLP East	Solid	1312	
500-174842-2	2615V2-01-B50 (5-10)	SPLP East	Solid	1312	
500-174842-3	2615V2-01-B50 (10-15)	SPLP East	Solid	1312	
500-174842-4	2615V2-01-B50 (15-23)	SPLP East	Solid	1312	
500-174842-5	2615V2-01-B50 (23-31)	SPLP East	Solid	1312	
500-174842-6	2615V2-01-B50 (31-39)	SPLP East	Solid	1312	
500-174842-7	2615V2-01-B50 (39-47)	SPLP East	Solid	1312	
500-174842-8	2615V2-01-B57 (0-5)	SPLP East	Solid	1312	
500-174842-9	2615V2-01-B57 (5-10)	SPLP East	Solid	1312	
500-174842-10	2615V2-01-B57 (10-15)	SPLP East	Solid	1312	
500-174842-11	2615V2-01-B57 (15-23)	SPLP East	Solid	1312	
500-174842-12	2615V2-01-B57 (23-31)	SPLP East	Solid	1312	
500-174842-13	2615V2-01-B57 (31-39)	SPLP East	Solid	1312	
500-174842-14	2615V2-01-B57 (39-47)	SPLP East	Solid	1312	
LB 500-522172/1-B	Method Blank	SPLP East	Solid	1312	
500-174842-14 MS	2615V2-01-B57 (39-47)	SPLP East	Solid	1312	
500-174842-14 DU	2615V2-01-B57 (39-47)	SPLP East	Solid	1312	

Analysis Batch: 522179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	TCLP	Solid	6010B	522004
500-174842-2	2615V2-01-B50 (5-10)	TCLP	Solid	6010B	522004
500-174842-3	2615V2-01-B50 (10-15)	TCLP	Solid	6010B	522004
500-174842-4	2615V2-01-B50 (15-23)	TCLP	Solid	6010B	522004
500-174842-5	2615V2-01-B50 (23-31)	TCLP	Solid	6010B	522004
500-174842-6	2615V2-01-B50 (31-39)	TCLP	Solid	6010B	522004
LB 500-521521/1-B	Method Blank	TCLP	Solid	6010B	522004
LCS 500-522004/2-A	Lab Control Sample	Total/NA	Solid	6010B	522004

Analysis Batch: 522196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	TCLP	Solid	6020A	522004
500-174842-2	2615V2-01-B50 (5-10)	TCLP	Solid	6020A	522004
500-174842-3	2615V2-01-B50 (10-15)	TCLP	Solid	6020A	522004
500-174842-4	2615V2-01-B50 (15-23)	TCLP	Solid	6020A	522004
500-174842-5	2615V2-01-B50 (23-31)	TCLP	Solid	6020A	522004
500-174842-6	2615V2-01-B50 (31-39)	TCLP	Solid	6020A	522004
LB 500-521521/1-B	Method Blank	TCLP	Solid	6020A	522004
LCS 500-522004/2-A	Lab Control Sample	Total/NA	Solid	6020A	522004

Prep Batch: 522244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-7	2615V2-01-B50 (39-47)	TCLP	Solid	3010A	521521
500-174842-8	2615V2-01-B57 (0-5)	TCLP	Solid	3010A	521521
500-174842-9	2615V2-01-B57 (5-10)	TCLP	Solid	3010A	521521
500-174842-10	2615V2-01-B57 (10-15)	TCLP	Solid	3010A	521521
500-174842-11	2615V2-01-B57 (15-23)	TCLP	Solid	3010A	521521

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals (Continued)

Prep Batch: 522244 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-12	2615V2-01-B57 (23-31)	TCLP	Solid	3010A	521521
500-174842-13	2615V2-01-B57 (31-39)	TCLP	Solid	3010A	521521
500-174842-14	2615V2-01-B57 (39-47)	TCLP	Solid	3010A	521521
LB 500-521521/1-C	Method Blank	TCLP	Solid	3010A	521521
LCS 500-522244/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174842-14 MS	2615V2-01-B57 (39-47)	TCLP	Solid	3010A	521521
500-174842-14 DU	2615V2-01-B57 (39-47)	TCLP	Solid	3010A	521521

Prep Batch: 522309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	TCLP	Solid	7470A	521521
500-174842-2	2615V2-01-B50 (5-10)	TCLP	Solid	7470A	521521
500-174842-3	2615V2-01-B50 (10-15)	TCLP	Solid	7470A	521521
500-174842-4	2615V2-01-B50 (15-23)	TCLP	Solid	7470A	521521
500-174842-5	2615V2-01-B50 (23-31)	TCLP	Solid	7470A	521521
500-174842-6	2615V2-01-B50 (31-39)	TCLP	Solid	7470A	521521
500-174842-7	2615V2-01-B50 (39-47)	TCLP	Solid	7470A	521521
500-174842-8	2615V2-01-B57 (0-5)	TCLP	Solid	7470A	521521
500-174842-9	2615V2-01-B57 (5-10)	TCLP	Solid	7470A	521521
500-174842-10	2615V2-01-B57 (10-15)	TCLP	Solid	7470A	521521
500-174842-11	2615V2-01-B57 (15-23)	TCLP	Solid	7470A	521521
500-174842-12	2615V2-01-B57 (23-31)	TCLP	Solid	7470A	521521
500-174842-13	2615V2-01-B57 (31-39)	TCLP	Solid	7470A	521521
500-174842-14	2615V2-01-B57 (39-47)	TCLP	Solid	7470A	521521
LB 500-521521/1-D	Method Blank	TCLP	Solid	7470A	521521
MB 500-522309/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-522309/15-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174842-6 MS	2615V2-01-B50 (31-39)	TCLP	Solid	7470A	521521
500-174842-6 DU	2615V2-01-B50 (31-39)	TCLP	Solid	7470A	521521

Prep Batch: 522364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	SPLP East	Solid	3010A	522172
500-174842-2	2615V2-01-B50 (5-10)	SPLP East	Solid	3010A	522172
500-174842-3	2615V2-01-B50 (10-15)	SPLP East	Solid	3010A	522172
500-174842-4	2615V2-01-B50 (15-23)	SPLP East	Solid	3010A	522172
500-174842-5	2615V2-01-B50 (23-31)	SPLP East	Solid	3010A	522172
500-174842-6	2615V2-01-B50 (31-39)	SPLP East	Solid	3010A	522172
500-174842-7	2615V2-01-B50 (39-47)	SPLP East	Solid	3010A	522172
500-174842-8	2615V2-01-B57 (0-5)	SPLP East	Solid	3010A	522172
500-174842-9	2615V2-01-B57 (5-10)	SPLP East	Solid	3010A	522172
500-174842-10	2615V2-01-B57 (10-15)	SPLP East	Solid	3010A	522172
500-174842-11	2615V2-01-B57 (15-23)	SPLP East	Solid	3010A	522172
500-174842-12	2615V2-01-B57 (23-31)	SPLP East	Solid	3010A	522172
500-174842-13	2615V2-01-B57 (31-39)	SPLP East	Solid	3010A	522172
500-174842-14	2615V2-01-B57 (39-47)	SPLP East	Solid	3010A	522172
LB 500-522172/1-B	Method Blank	SPLP East	Solid	3010A	522172
LCS 500-522364/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174842-14 MS	2615V2-01-B57 (39-47)	SPLP East	Solid	3010A	522172
500-174842-14 DU	2615V2-01-B57 (39-47)	SPLP East	Solid	3010A	522172

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals

Analysis Batch: 522410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-7	2615V2-01-B50 (39-47)	TCLP	Solid	6010B	522244
500-174842-8	2615V2-01-B57 (0-5)	TCLP	Solid	6010B	522244
500-174842-9	2615V2-01-B57 (5-10)	TCLP	Solid	6010B	522244
500-174842-10	2615V2-01-B57 (10-15)	TCLP	Solid	6010B	522244
500-174842-11	2615V2-01-B57 (15-23)	TCLP	Solid	6010B	522244
500-174842-12	2615V2-01-B57 (23-31)	TCLP	Solid	6010B	522244
500-174842-13	2615V2-01-B57 (31-39)	TCLP	Solid	6010B	522244
500-174842-14	2615V2-01-B57 (39-47)	TCLP	Solid	6010B	522244
LB 500-521521/1-C	Method Blank	TCLP	Solid	6010B	522244
LCS 500-522244/2-A	Lab Control Sample	Total/NA	Solid	6010B	522244
500-174842-14 MS	2615V2-01-B57 (39-47)	TCLP	Solid	6010B	522244
500-174842-14 DU	2615V2-01-B57 (39-47)	TCLP	Solid	6010B	522244

Analysis Batch: 522524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	TCLP	Solid	7470A	522309
500-174842-2	2615V2-01-B50 (5-10)	TCLP	Solid	7470A	522309
500-174842-3	2615V2-01-B50 (10-15)	TCLP	Solid	7470A	522309
500-174842-4	2615V2-01-B50 (15-23)	TCLP	Solid	7470A	522309
500-174842-5	2615V2-01-B50 (23-31)	TCLP	Solid	7470A	522309
500-174842-6	2615V2-01-B50 (31-39)	TCLP	Solid	7470A	522309
500-174842-7	2615V2-01-B50 (39-47)	TCLP	Solid	7470A	522309
500-174842-8	2615V2-01-B57 (0-5)	TCLP	Solid	7470A	522309
500-174842-9	2615V2-01-B57 (5-10)	TCLP	Solid	7470A	522309
500-174842-10	2615V2-01-B57 (10-15)	TCLP	Solid	7470A	522309
500-174842-11	2615V2-01-B57 (15-23)	TCLP	Solid	7470A	522309
500-174842-12	2615V2-01-B57 (23-31)	TCLP	Solid	7470A	522309
500-174842-13	2615V2-01-B57 (31-39)	TCLP	Solid	7470A	522309
500-174842-14	2615V2-01-B57 (39-47)	TCLP	Solid	7470A	522309
LB 500-521521/1-D	Method Blank	TCLP	Solid	7470A	522309
MB 500-522309/12-A	Method Blank	Total/NA	Solid	7470A	522309
LCS 500-522309/15-A	Lab Control Sample	Total/NA	Solid	7470A	522309
500-174842-6 MS	2615V2-01-B50 (31-39)	TCLP	Solid	7470A	522309
500-174842-6 DU	2615V2-01-B50 (31-39)	TCLP	Solid	7470A	522309

Analysis Batch: 522543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	SPLP East	Solid	6010B	522364
500-174842-2	2615V2-01-B50 (5-10)	SPLP East	Solid	6010B	522364
500-174842-3	2615V2-01-B50 (10-15)	SPLP East	Solid	6010B	522364
500-174842-4	2615V2-01-B50 (15-23)	SPLP East	Solid	6010B	522364
500-174842-5	2615V2-01-B50 (23-31)	SPLP East	Solid	6010B	522364
500-174842-6	2615V2-01-B50 (31-39)	SPLP East	Solid	6010B	522364
500-174842-7	2615V2-01-B50 (39-47)	SPLP East	Solid	6010B	522364
500-174842-8	2615V2-01-B57 (0-5)	SPLP East	Solid	6010B	522364
500-174842-9	2615V2-01-B57 (5-10)	SPLP East	Solid	6010B	522364
500-174842-10	2615V2-01-B57 (10-15)	SPLP East	Solid	6010B	522364
500-174842-11	2615V2-01-B57 (15-23)	SPLP East	Solid	6010B	522364
500-174842-12	2615V2-01-B57 (23-31)	SPLP East	Solid	6010B	522364
500-174842-13	2615V2-01-B57 (31-39)	SPLP East	Solid	6010B	522364
500-174842-14	2615V2-01-B57 (39-47)	SPLP East	Solid	6010B	522364

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Metals (Continued)

Analysis Batch: 522543 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-522172/1-B	Method Blank	SPLP East	Solid	6010B	522364
LCS 500-522364/2-A	Lab Control Sample	Total/NA	Solid	6010B	522364
500-174842-14 MS	2615V2-01-B57 (39-47)	SPLP East	Solid	6010B	522364
500-174842-14 DU	2615V2-01-B57 (39-47)	SPLP East	Solid	6010B	522364

Analysis Batch: 522587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-7	2615V2-01-B50 (39-47)	TCLP	Solid	6020A	522244
500-174842-8	2615V2-01-B57 (0-5)	TCLP	Solid	6020A	522244
500-174842-9	2615V2-01-B57 (5-10)	TCLP	Solid	6020A	522244
500-174842-10	2615V2-01-B57 (10-15)	TCLP	Solid	6020A	522244
500-174842-11	2615V2-01-B57 (15-23)	TCLP	Solid	6020A	522244
500-174842-12	2615V2-01-B57 (23-31)	TCLP	Solid	6020A	522244
500-174842-13	2615V2-01-B57 (31-39)	TCLP	Solid	6020A	522244
500-174842-14	2615V2-01-B57 (39-47)	TCLP	Solid	6020A	522244
LB 500-521521/1-C	Method Blank	TCLP	Solid	6020A	522244
LCS 500-522244/2-A	Lab Control Sample	Total/NA	Solid	6020A	522244
500-174842-14 MS	2615V2-01-B57 (39-47)	TCLP	Solid	6020A	522244
500-174842-14 DU	2615V2-01-B57 (39-47)	TCLP	Solid	6020A	522244

General Chemistry

Analysis Batch: 520814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	Moisture	
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	Moisture	
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	Moisture	
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	Moisture	
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	Moisture	
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	Moisture	
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	Moisture	
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	Moisture	
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	Moisture	
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	Moisture	
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	Moisture	
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	Moisture	
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	Moisture	
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	Moisture	
500-174842-5 DU	2615V2-01-B50 (23-31)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174842-1	2615V2-01-B50 (0-5)	93	95	69 X	97
500-174842-2	2615V2-01-B50 (5-10)	96	94	90	99
500-174842-3	2615V2-01-B50 (10-15)	92	102	86	94
500-174842-4	2615V2-01-B50 (15-23)	91	98	89	88
500-174842-5	2615V2-01-B50 (23-31)	95	89	90	102
500-174842-6	2615V2-01-B50 (31-39)	91	125 *	90	102
500-174842-7	2615V2-01-B50 (39-47)	102	99	94	96
500-174842-8	2615V2-01-B57 (0-5)	96	100	90	89
500-174842-9	2615V2-01-B57 (5-10)	94	99	87	94
500-174842-10	2615V2-01-B57 (10-15)	90	88	85	97
500-174842-11	2615V2-01-B57 (15-23)	99	105	96	88
500-174842-12	2615V2-01-B57 (23-31)	98	107	94	93
500-174842-13	2615V2-01-B57 (31-39)	91	94	87	105
500-174842-14	2615V2-01-B57 (39-47)	92	103	88	84
LCS 500-521534/4	Lab Control Sample	86	88	86	94
LCS 500-521534/5	Lab Control Sample Dup	86	89	85	100
MB 500-521534/7	Method Blank	86	96	86	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174842-1	2615V2-01-B50 (0-5)	170 X	143	112	119	71	149
500-174842-2	2615V2-01-B50 (5-10)	121	92	97	101	56	109
500-174842-2 MS	2615V2-01-B50 (5-10)	148	132	103	111	63	139
500-174842-2 MSD	2615V2-01-B50 (5-10)	138	129	104	119	69	148
500-174842-3	2615V2-01-B50 (10-15)	113	107	96	95	47	114
500-174842-4	2615V2-01-B50 (15-23)	143	111	98	104	55	142
500-174842-5	2615V2-01-B50 (23-31)	140	109	102	104	62	143
500-174842-6	2615V2-01-B50 (31-39)	104	93	78	96	49	107
500-174842-7	2615V2-01-B50 (39-47)	149	117	106	109	61	158 X
500-174842-8	2615V2-01-B57 (0-5)	111	94	85	104	50	116
500-174842-8 - DL	2615V2-01-B57 (0-5)	144	114	93	92	48	116
500-174842-9	2615V2-01-B57 (5-10)	153	120	105	111	79	162 X
500-174842-10	2615V2-01-B57 (10-15)	145	111	103	104	63	149
500-174842-11	2615V2-01-B57 (15-23)	115	99	86	105	60	128
500-174842-12	2615V2-01-B57 (23-31)	57	100	102	99	62	133
500-174842-13	2615V2-01-B57 (31-39)	136	104	99	104	72	143
500-174842-14	2615V2-01-B57 (39-47)	86	91	81	97	55	120
LCS 500-521361/2-A	Lab Control Sample	133	114	90	109	87	116
MB 500-521361/1-A	Method Blank	139	118	88	105	64	131

Surrogate Legend

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521534/7
Matrix: Solid
Analysis Batch: 521534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/19/19 23:40	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/19/19 23:40	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/19/19 23:40	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 23:40	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 23:40	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/19/19 23:40	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/19/19 23:40	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/19/19 23:40	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/19/19 23:40	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/19/19 23:40	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/19/19 23:40	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/19/19 23:40	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/19/19 23:40	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/19/19 23:40	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/19/19 23:40	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/19/19 23:40	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/19/19 23:40	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/19/19 23:40	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/19/19 23:40	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/19/19 23:40	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 23:40	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/19/19 23:40	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/19/19 23:40	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/19/19 23:40	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/19/19 23:40	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/19/19 23:40	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/19/19 23:40	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/19/19 23:40	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/19/19 23:40	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/19/19 23:40	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/19/19 23:40	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/19/19 23:40	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/19/19 23:40	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/19/19 23:40	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/19/19 23:40	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/19/19 23:40	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/19/19 23:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134		12/19/19 23:40	1
4-Bromofluorobenzene (Surr)	96		75 - 131		12/19/19 23:40	1
Dibromofluoromethane	86		75 - 126		12/19/19 23:40	1
Toluene-d8 (Surr)	93		75 - 124		12/19/19 23:40	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521534/4

Matrix: Solid

Analysis Batch: 521534

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0435		mg/Kg		87	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0435		mg/Kg		87	70 - 122
1,1,2-Trichloroethane	0.0500	0.0465		mg/Kg		93	70 - 125
1,1-Dichloroethane	0.0500	0.0505		mg/Kg		101	70 - 125
1,1-Dichloroethene	0.0500	0.0470		mg/Kg		94	70 - 120
1,2-Dichloroethane	0.0500	0.0466		mg/Kg		93	70 - 130
1,2-Dichloropropane	0.0500	0.0500		mg/Kg		100	70 - 125
2-Butanone (MEK)	0.0500	0.0463		mg/Kg		93	47 - 138
2-Hexanone	0.0500	0.0493		mg/Kg		99	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0497		mg/Kg		99	50 - 148
Acetone	0.0500	0.0454		mg/Kg		91	40 - 150
Benzene	0.0500	0.0470		mg/Kg		94	70 - 125
Bromodichloromethane	0.0500	0.0415		mg/Kg		83	67 - 129
Bromoform	0.0500	0.0383		mg/Kg		77	68 - 136
Bromomethane	0.0500	0.0436		mg/Kg		87	70 - 130
Carbon disulfide	0.0500	0.0456		mg/Kg		91	70 - 129
Carbon tetrachloride	0.0500	0.0417		mg/Kg		83	75 - 125
Chlorobenzene	0.0500	0.0467		mg/Kg		93	50 - 150
Chloroethane	0.0500	0.0526		mg/Kg		105	75 - 125
Chloroform	0.0500	0.0442		mg/Kg		88	57 - 135
Chloromethane	0.0500	0.0470		mg/Kg		94	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0467		mg/Kg		93	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0442		mg/Kg		88	70 - 125
Dibromochloromethane	0.0500	0.0423		mg/Kg		85	69 - 125
Ethylbenzene	0.0500	0.0464		mg/Kg		93	61 - 136
Methyl tert-butyl ether	0.0500	0.0459		mg/Kg		92	50 - 140
Methylene Chloride	0.0500	0.0467		mg/Kg		93	70 - 126
Styrene	0.0500	0.0452		mg/Kg		90	70 - 125
Tetrachloroethene	0.0500	0.0460		mg/Kg		92	70 - 124
Toluene	0.0500	0.0482		mg/Kg		96	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0465		mg/Kg		93	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0413		mg/Kg		83	70 - 125
Trichloroethene	0.0500	0.0460		mg/Kg		92	70 - 125
Vinyl acetate	0.0500	0.0356		mg/Kg		71	40 - 153
Vinyl chloride	0.0500	0.0434		mg/Kg		87	70 - 125
Xylenes, Total	0.100	0.0921		mg/Kg		92	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	88		75 - 131
Dibromofluoromethane	86		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-521534/5
Matrix: Solid
Analysis Batch: 521534

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0444		mg/Kg		89	70 - 128	2	30
1,1,2,2-Tetrachloroethane	0.0500	0.0449		mg/Kg		90	70 - 122	3	30
1,1,2-Trichloroethane	0.0500	0.0483		mg/Kg		97	70 - 125	4	30
1,1-Dichloroethane	0.0500	0.0512		mg/Kg		102	70 - 125	1	30
1,1-Dichloroethene	0.0500	0.0473		mg/Kg		95	70 - 120	1	30
1,2-Dichloroethane	0.0500	0.0467		mg/Kg		93	70 - 130	0	30
1,2-Dichloropropane	0.0500	0.0516		mg/Kg		103	70 - 125	3	30
2-Butanone (MEK)	0.0500	0.0481		mg/Kg		96	47 - 138	4	30
2-Hexanone	0.0500	0.0518		mg/Kg		104	48 - 146	5	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0544		mg/Kg		109	50 - 148	9	30
Acetone	0.0500	0.0507		mg/Kg		101	40 - 150	11	30
Benzene	0.0500	0.0479		mg/Kg		96	70 - 125	2	30
Bromodichloromethane	0.0500	0.0429		mg/Kg		86	67 - 129	3	30
Bromoform	0.0500	0.0403		mg/Kg		81	68 - 136	5	30
Bromomethane	0.0500	0.0415		mg/Kg		83	70 - 130	5	30
Carbon disulfide	0.0500	0.0467		mg/Kg		93	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0431		mg/Kg		86	75 - 125	3	30
Chlorobenzene	0.0500	0.0489		mg/Kg		98	50 - 150	5	30
Chloroethane	0.0500	0.0443		mg/Kg		89	75 - 125	17	30
Chloroform	0.0500	0.0450		mg/Kg		90	57 - 135	2	30
Chloromethane	0.0500	0.0480		mg/Kg		96	70 - 125	2	30
cis-1,2-Dichloroethene	0.0500	0.0476		mg/Kg		95	70 - 125	2	30
cis-1,3-Dichloropropene	0.0500	0.0471		mg/Kg		94	70 - 125	6	30
Dibromochloromethane	0.0500	0.0440		mg/Kg		88	69 - 125	4	30
Ethylbenzene	0.0500	0.0485		mg/Kg		97	61 - 136	4	30
Methyl tert-butyl ether	0.0500	0.0474		mg/Kg		95	50 - 140	3	30
Methylene Chloride	0.0500	0.0489		mg/Kg		98	70 - 126	5	30
Styrene	0.0500	0.0466		mg/Kg		93	70 - 125	3	30
Tetrachloroethene	0.0500	0.0479		mg/Kg		96	70 - 124	4	30
Toluene	0.0500	0.0511		mg/Kg		102	70 - 125	6	30
trans-1,2-Dichloroethene	0.0500	0.0472		mg/Kg		94	70 - 125	2	30
trans-1,3-Dichloropropene	0.0500	0.0445		mg/Kg		89	70 - 125	7	30
Trichloroethene	0.0500	0.0473		mg/Kg		95	70 - 125	3	30
Vinyl acetate	0.0500	0.0361		mg/Kg		72	40 - 153	1	30
Vinyl chloride	0.0500	0.0433		mg/Kg		87	70 - 125	0	30
Xylenes, Total	0.100	0.0960		mg/Kg		96	53 - 147	4	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	89		75 - 131
Dibromofluoromethane	85		75 - 126
Toluene-d8 (Surr)	100		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521361/1-A
Matrix: Solid
Analysis Batch: 521499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521361

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/18/19 16:35	12/19/19 21:40	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521361/1-A
Matrix: Solid
Analysis Batch: 521499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/18/19 16:35	12/19/19 21:40	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/18/19 16:35	12/19/19 21:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	139		31 - 166	12/18/19 16:35	12/19/19 21:40	1
Phenol-d5	118		30 - 153	12/18/19 16:35	12/19/19 21:40	1
Nitrobenzene-d5	88		37 - 147	12/18/19 16:35	12/19/19 21:40	1
2-Fluorobiphenyl	105		43 - 145	12/18/19 16:35	12/19/19 21:40	1
2,4,6-Tribromophenol	64		31 - 143	12/18/19 16:35	12/19/19 21:40	1
Terphenyl-d14	131		42 - 157	12/18/19 16:35	12/19/19 21:40	1

Lab Sample ID: LCS 500-521361/2-A
Matrix: Solid
Analysis Batch: 521499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.47		mg/Kg		110	56 - 122
Bis(2-chloroethyl)ether	1.33	1.26		mg/Kg		94	55 - 111
1,3-Dichlorobenzene	1.33	1.33		mg/Kg		99	65 - 124
1,4-Dichlorobenzene	1.33	1.35		mg/Kg		101	61 - 110
1,2-Dichlorobenzene	1.33	1.35		mg/Kg		101	62 - 110
2-Methylphenol	1.33	1.44		mg/Kg		108	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.33		mg/Kg		100	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.18		mg/Kg		89	56 - 118
Hexachloroethane	1.33	1.22		mg/Kg		92	60 - 114
2-Chlorophenol	1.33	1.45		mg/Kg		109	64 - 110
Nitrobenzene	1.33	1.35		mg/Kg		101	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.31		mg/Kg		98	60 - 112
1,2,4-Trichlorobenzene	1.33	1.47		mg/Kg		110	66 - 117
Isophorone	1.33	1.26		mg/Kg		95	55 - 110
2,4-Dimethylphenol	1.33	1.43		mg/Kg		107	60 - 110
Hexachlorobutadiene	1.33	1.47		mg/Kg		111	56 - 120
Naphthalene	1.33	1.39		mg/Kg		104	63 - 110
2,4-Dichlorophenol	1.33	1.51		mg/Kg		113	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521361/2-A

Matrix: Solid

Analysis Batch: 521499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 521361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.35		mg/Kg		101	30 - 150
2,4,6-Trichlorophenol	1.33	1.37		mg/Kg		102	57 - 120
2,4,5-Trichlorophenol	1.33	1.48		mg/Kg		111	50 - 120
Hexachlorocyclopentadiene	1.33	0.986		mg/Kg		74	10 - 133
2-Methylnaphthalene	1.33	1.43		mg/Kg		107	69 - 112
2-Nitroaniline	1.33	1.36		mg/Kg		102	57 - 124
2-Chloronaphthalene	1.33	1.45		mg/Kg		109	69 - 114
4-Chloro-3-methylphenol	1.33	1.47		mg/Kg		110	65 - 122
2,6-Dinitrotoluene	1.33	1.51		mg/Kg		113	70 - 123
2-Nitrophenol	1.33	1.48		mg/Kg		111	60 - 120
3-Nitroaniline	1.33	1.22		mg/Kg		91	40 - 122
Dimethyl phthalate	1.33	1.44		mg/Kg		108	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		10	10 - 100
Acenaphthylene	1.33	1.47		mg/Kg		110	68 - 120
2,4-Dinitrotoluene	1.33	1.60		mg/Kg		120	69 - 124
Acenaphthene	1.33	1.46		mg/Kg		109	65 - 124
Dibenzofuran	1.33	1.44		mg/Kg		108	66 - 115
4-Nitrophenol	2.67	2.69		mg/Kg		101	30 - 122
Fluorene	1.33	1.49		mg/Kg		112	62 - 120
4-Nitroaniline	1.33	1.38		mg/Kg		103	60 - 160
4-Bromophenyl phenyl ether	1.33	1.48		mg/Kg		111	68 - 118
Hexachlorobenzene	1.33	1.55		mg/Kg		116	63 - 124
Diethyl phthalate	1.33	1.50		mg/Kg		113	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.44		mg/Kg		108	62 - 119
Pentachlorophenol	2.67	1.26		mg/Kg		47	13 - 112
N-Nitrosodiphenylamine	1.33	1.54	*	mg/Kg		116	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.647	J	mg/Kg		24	10 - 110
Phenanthrene	1.33	1.50		mg/Kg		112	62 - 120
Anthracene	1.33	1.54	*	mg/Kg		116	70 - 114
Carbazole	1.33	1.66		mg/Kg		125	65 - 142
Di-n-butyl phthalate	1.33	1.50		mg/Kg		113	65 - 120
Fluoranthene	1.33	1.56		mg/Kg		117	62 - 120
Pyrene	1.33	1.50		mg/Kg		113	61 - 128
Butyl benzyl phthalate	1.33	1.46		mg/Kg		109	71 - 129
Benzo[a]anthracene	1.33	1.57		mg/Kg		118	67 - 122
Chrysene	1.33	1.48		mg/Kg		111	63 - 120
3,3'-Dichlorobenzidine	1.33	1.27		mg/Kg		95	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.47		mg/Kg		110	72 - 131
Di-n-octyl phthalate	1.33	1.52		mg/Kg		114	68 - 134
Benzo[b]fluoranthene	1.33	1.55		mg/Kg		117	69 - 129
Benzo[k]fluoranthene	1.33	1.63		mg/Kg		122	68 - 127
Benzo[a]pyrene	1.33	1.58		mg/Kg		119	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.71		mg/Kg		128	68 - 130
Dibenz(a,h)anthracene	1.33	1.79	*	mg/Kg		134	64 - 131
Benzo[g,h,i]perylene	1.33	1.72		mg/Kg		129	72 - 131
3 & 4 Methylphenol	1.33	1.36		mg/Kg		102	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521361/2-A
Matrix: Solid
Analysis Batch: 521499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521361

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	133		31 - 166
Phenol-d5	114		30 - 153
Nitrobenzene-d5	90		37 - 147
2-Fluorobiphenyl	109		43 - 145
2,4,6-Tribromophenol	87		31 - 143
Terphenyl-d14	116		42 - 157

Lab Sample ID: 500-174842-2 MS
Matrix: Solid
Analysis Batch: 522273

Client Sample ID: 2615V2-01-B50 (5-10)
Prep Type: Total/NA
Prep Batch: 521361

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Phenol	<0.20	F1	1.64	2.51	F1	mg/Kg	☼	154	56 - 122
Bis(2-chloroethyl)ether	<0.20	F1	1.64	1.99	F1	mg/Kg	☼	121	55 - 111
1,3-Dichlorobenzene	<0.20		1.64	1.60		mg/Kg	☼	98	60 - 110
1,4-Dichlorobenzene	<0.20		1.64	1.63		mg/Kg	☼	100	61 - 110
1,2-Dichlorobenzene	<0.20		1.64	1.66		mg/Kg	☼	101	62 - 110
2-Methylphenol	<0.20	F1	1.64	2.27	F1	mg/Kg	☼	138	60 - 120
2,2'-oxybis[1-chloropropane]	<0.20		1.64	1.70		mg/Kg	☼	104	40 - 124
N-Nitrosodi-n-propylamine	<0.082	F1	1.64	2.21	F1	mg/Kg	☼	135	56 - 118
Hexachloroethane	<0.20	F1	1.64	0.718	F1	mg/Kg	☼	44	60 - 114
2-Chlorophenol	<0.20	F1	1.64	1.87	F1	mg/Kg	☼	114	64 - 110
Nitrobenzene	<0.040	F1	1.64	2.14	F1	mg/Kg	☼	131	60 - 116
Bis(2-chloroethoxy)methane	<0.20	F1	1.64	1.95	F1	mg/Kg	☼	119	60 - 112
1,2,4-Trichlorobenzene	<0.20	F1	1.64	1.99	F1	mg/Kg	☼	122	66 - 117
Isophorone	<0.20	F1	1.64	1.99	F1	mg/Kg	☼	121	55 - 110
2,4-Dimethylphenol	<0.40	F1	1.64	1.81	F1	mg/Kg	☼	111	60 - 110
Hexachlorobutadiene	<0.20		1.64	1.83		mg/Kg	☼	112	56 - 120
Naphthalene	<0.040	F1	1.64	1.94	F1	mg/Kg	☼	118	63 - 110
2,4-Dichlorophenol	<0.40		1.64	1.91		mg/Kg	☼	117	58 - 120
4-Chloroaniline	<0.82		1.64	1.04		mg/Kg	☼	64	30 - 150
2,4,6-Trichlorophenol	<0.40		1.64	1.38		mg/Kg	☼	85	57 - 120
2,4,5-Trichlorophenol	<0.40		1.64	1.21		mg/Kg	☼	74	50 - 120
Hexachlorocyclopentadiene	<0.82	F1	1.64	<0.82	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.083	F1	1.64	2.07	F1	mg/Kg	☼	121	69 - 112
2-Nitroaniline	<0.20		1.64	1.84		mg/Kg	☼	112	57 - 124
2-Chloronaphthalene	<0.20	F1	1.64	1.93	F1	mg/Kg	☼	118	69 - 114
4-Chloro-3-methylphenol	<0.40		1.64	1.80		mg/Kg	☼	110	65 - 122
2,6-Dinitrotoluene	<0.20		1.64	1.88		mg/Kg	☼	115	70 - 123
2-Nitrophenol	<0.40		1.64	1.69		mg/Kg	☼	103	60 - 120
3-Nitroaniline	<0.40		1.64	1.62		mg/Kg	☼	99	40 - 122
Dimethyl phthalate	<0.20	F1	1.64	1.97	F1	mg/Kg	☼	120	69 - 116
2,4-Dinitrophenol	<0.82	F1	3.27	<0.82	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.040		1.64	1.88		mg/Kg	☼	115	68 - 120
2,4-Dinitrotoluene	<0.20		1.64	1.83		mg/Kg	☼	112	69 - 124
Acenaphthene	0.041		1.64	1.95		mg/Kg	☼	116	65 - 124
Dibenzofuran	<0.20	F1	1.64	2.09	F1	mg/Kg	☼	128	66 - 115
4-Nitrophenol	<0.82	F2 F1	3.27	1.23		mg/Kg	☼	38	30 - 122

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174842-2 MS

Matrix: Solid

Analysis Batch: 522273

Client Sample ID: 2615V2-01-B50 (5-10)

Prep Type: Total/NA

Prep Batch: 521361

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Fluorene	0.036	J F1	1.64	2.06	F1	mg/Kg	☼	124	62 - 120	
4-Nitroaniline	<0.40		1.64	1.63		mg/Kg	☼	100	60 - 160	
4-Bromophenyl phenyl ether	<0.20	F1	1.64	2.06	F1	mg/Kg	☼	126	68 - 118	
Hexachlorobenzene	<0.082	F1	1.64	2.23	F1	mg/Kg	☼	136	63 - 124	
Diethyl phthalate	<0.20		1.64	1.89		mg/Kg	☼	116	58 - 120	
4-Chlorophenyl phenyl ether	<0.20	F1	1.64	2.08	F1	mg/Kg	☼	127	62 - 119	
Pentachlorophenol	<0.82	F1	3.27	<0.82	F1	mg/Kg	☼	0	13 - 112	
N-Nitrosodiphenylamine	<0.20	F1 *	1.64	2.06	F1	mg/Kg	☼	126	65 - 112	
4,6-Dinitro-2-methylphenol	<0.82	F1	3.27	<0.82	F1	mg/Kg	☼	0	10 - 110	
Phenanthrene	0.15	F1	1.64	2.18	F1	mg/Kg	☼	124	62 - 120	
Anthracene	0.024	J F1 *	1.64	2.07	F1	mg/Kg	☼	125	70 - 114	
Carbazole	<0.20	F1	1.64	2.35	F1	mg/Kg	☼	143	65 - 142	
Di-n-butyl phthalate	<0.20		1.64	1.85		mg/Kg	☼	113	65 - 120	
Fluoranthene	0.043	F1	1.64	2.14	F1	mg/Kg	☼	128	62 - 120	
Pyrene	0.041	F1	1.64	2.28	F1	mg/Kg	☼	137	61 - 128	
Butyl benzyl phthalate	<0.20		1.64	1.85		mg/Kg	☼	113	71 - 129	
Benzo[a]anthracene	0.0087	J	1.64	1.99		mg/Kg	☼	121	67 - 122	
Chrysene	0.035	J	1.64	1.85		mg/Kg	☼	111	63 - 120	
3,3'-Dichlorobenzidine	<0.20		1.64	1.45		mg/Kg	☼	88	35 - 128	
Bis(2-ethylhexyl) phthalate	<0.20		1.64	1.88		mg/Kg	☼	115	72 - 131	
Di-n-octyl phthalate	<0.20		1.64	1.60		mg/Kg	☼	98	68 - 134	
Benzo[b]fluoranthene	0.017	J F1	1.64	2.28	F1	mg/Kg	☼	138	69 - 129	
Benzo[k]fluoranthene	<0.040	F1	1.64	2.39	F1	mg/Kg	☼	146	68 - 127	
Benzo[a]pyrene	<0.040		1.64	1.95		mg/Kg	☼	119	65 - 133	
Indeno[1,2,3-cd]pyrene	<0.040		1.64	1.31		mg/Kg	☼	80	68 - 130	
Dibenz(a,h)anthracene	<0.040	*	1.64	1.38		mg/Kg	☼	85	64 - 131	
Benzo[g,h,i]perylene	0.017	J F1	1.64	1.12	F1	mg/Kg	☼	67	72 - 131	
3 & 4 Methylphenol	<0.20	F1	1.64	2.20	F1	mg/Kg	☼	134	57 - 120	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	148		31 - 166
Phenol-d5	132		30 - 153
Nitrobenzene-d5	103		37 - 147
2-Fluorobiphenyl	111		43 - 145
2,4,6-Tribromophenol	63		31 - 143
Terphenyl-d14	139		42 - 157

Lab Sample ID: 500-174842-2 MSD

Matrix: Solid

Analysis Batch: 522273

Client Sample ID: 2615V2-01-B50 (5-10)

Prep Type: Total/NA

Prep Batch: 521361

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	Limits	RPD	
	Result	Qualifier		Result	Qualifier						RPD	Limit
Phenol	<0.20	F1	1.63	2.25	F1	mg/Kg	☼	139	56 - 122	11	30	
Bis(2-chloroethyl)ether	<0.20	F1	1.63	1.72		mg/Kg	☼	106	55 - 111	14	30	
1,3-Dichlorobenzene	<0.20		1.63	1.53		mg/Kg	☼	94	60 - 110	4	30	
1,4-Dichlorobenzene	<0.20		1.63	1.56		mg/Kg	☼	96	61 - 110	5	30	
1,2-Dichlorobenzene	<0.20		1.63	1.57		mg/Kg	☼	96	62 - 110	6	30	
2-Methylphenol	<0.20	F1	1.63	2.03	F1	mg/Kg	☼	125	60 - 120	11	30	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174842-2 MSD

Matrix: Solid

Analysis Batch: 522273

Client Sample ID: 2615V2-01-B50 (5-10)

Prep Type: Total/NA

Prep Batch: 521361

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,2'-oxybis[1-chloropropane]	<0.20		1.63	1.55		mg/Kg	☼	95	40 - 124	10	30
N-Nitrosodi-n-propylamine	<0.082	F1	1.63	1.97	F1	mg/Kg	☼	121	56 - 118	11	30
Hexachloroethane	<0.20	F1	1.63	0.679	F1	mg/Kg	☼	42	60 - 114	6	30
2-Chlorophenol	<0.20	F1	1.63	1.75		mg/Kg	☼	107	64 - 110	7	30
Nitrobenzene	<0.040	F1	1.63	2.09	F1	mg/Kg	☼	129	60 - 116	2	30
Bis(2-chloroethoxy)methane	<0.20	F1	1.63	1.87	F1	mg/Kg	☼	115	60 - 112	4	30
1,2,4-Trichlorobenzene	<0.20	F1	1.63	1.93	F1	mg/Kg	☼	119	66 - 117	3	30
Isophorone	<0.20	F1	1.63	1.88	F1	mg/Kg	☼	115	55 - 110	6	30
2,4-Dimethylphenol	<0.40	F1	1.63	1.70		mg/Kg	☼	104	60 - 110	7	30
Hexachlorobutadiene	<0.20		1.63	1.80		mg/Kg	☼	111	56 - 120	1	30
Naphthalene	<0.040	F1	1.63	1.85	F1	mg/Kg	☼	114	63 - 110	5	30
2,4-Dichlorophenol	<0.40		1.63	1.78		mg/Kg	☼	109	58 - 120	7	30
4-Chloroaniline	<0.82		1.63	1.12		mg/Kg	☼	69	30 - 150	7	30
2,4,6-Trichlorophenol	<0.40		1.63	1.43		mg/Kg	☼	88	57 - 120	3	30
2,4,5-Trichlorophenol	<0.40		1.63	1.45		mg/Kg	☼	89	50 - 120	18	30
Hexachlorocyclopentadiene	<0.82	F1	1.63	<0.82	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.083	F1	1.63	1.98	F1	mg/Kg	☼	117	69 - 112	4	30
2-Nitroaniline	<0.20		1.63	1.76		mg/Kg	☼	108	57 - 124	5	30
2-Chloronaphthalene	<0.20	F1	1.63	1.93	F1	mg/Kg	☼	119	69 - 114	0	30
4-Chloro-3-methylphenol	<0.40		1.63	1.72		mg/Kg	☼	106	65 - 122	5	30
2,6-Dinitrotoluene	<0.20		1.63	1.83		mg/Kg	☼	112	70 - 123	3	30
2-Nitrophenol	<0.40		1.63	1.57		mg/Kg	☼	97	60 - 120	7	30
3-Nitroaniline	<0.40		1.63	1.56		mg/Kg	☼	96	40 - 122	4	30
Dimethyl phthalate	<0.20	F1	1.63	1.94	F1	mg/Kg	☼	120	69 - 116	1	30
2,4-Dinitrophenol	<0.82	F1	3.25	<0.82	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.040		1.63	1.88		mg/Kg	☼	116	68 - 120	0	30
2,4-Dinitrotoluene	<0.20		1.63	1.76		mg/Kg	☼	108	69 - 124	4	30
Acenaphthene	0.041		1.63	1.90		mg/Kg	☼	114	65 - 124	2	30
Dibenzofuran	<0.20	F1	1.63	2.03	F1	mg/Kg	☼	125	66 - 115	3	30
4-Nitrophenol	<0.82	F2 F1	3.25	0.696	J F1 F2	mg/Kg	☼	21	30 - 122	55	30
Fluorene	0.036	J F1	1.63	2.02	F1	mg/Kg	☼	122	62 - 120	2	30
4-Nitroaniline	<0.40		1.63	1.64		mg/Kg	☼	101	60 - 160	0	30
4-Bromophenyl phenyl ether	<0.20	F1	1.63	1.99	F1	mg/Kg	☼	122	68 - 118	3	30
Hexachlorobenzene	<0.082	F1	1.63	2.15	F1	mg/Kg	☼	132	63 - 124	4	30
Diethyl phthalate	<0.20		1.63	1.87		mg/Kg	☼	115	58 - 120	1	30
4-Chlorophenyl phenyl ether	<0.20	F1	1.63	2.02	F1	mg/Kg	☼	124	62 - 119	3	30
Pentachlorophenol	<0.82	F1	3.25	<0.82	F1	mg/Kg	☼	0	13 - 112	NC	30
N-Nitrosodiphenylamine	<0.20	F1 *	1.63	2.02	F1	mg/Kg	☼	124	65 - 112	2	30
4,6-Dinitro-2-methylphenol	<0.82	F1	3.25	<0.82	F1	mg/Kg	☼	0	10 - 110	NC	30
Phenanthrene	0.15	F1	1.63	2.13	F1	mg/Kg	☼	122	62 - 120	3	30
Anthracene	0.024	J F1 *	1.63	1.98	F1	mg/Kg	☼	120	70 - 114	4	30
Carbazole	<0.20	F1	1.63	2.25		mg/Kg	☼	138	65 - 142	4	30
Di-n-butyl phthalate	<0.20		1.63	1.78		mg/Kg	☼	110	65 - 120	4	30
Fluoranthene	0.043	F1	1.63	2.06	F1	mg/Kg	☼	124	62 - 120	4	30
Pyrene	0.041	F1	1.63	2.21	F1	mg/Kg	☼	133	61 - 128	3	30
Butyl benzyl phthalate	<0.20		1.63	1.82		mg/Kg	☼	112	71 - 129	2	30
Benzo[a]anthracene	0.0087	J	1.63	1.89		mg/Kg	☼	116	67 - 122	5	30
Chrysene	0.035	J	1.63	1.74		mg/Kg	☼	105	63 - 120	6	30
3,3'-Dichlorobenzidine	<0.20		1.63	1.42		mg/Kg	☼	87	35 - 128	2	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174842-2 MSD

Matrix: Solid

Analysis Batch: 522273

Client Sample ID: 2615V2-01-B50 (5-10)

Prep Type: Total/NA

Prep Batch: 521361

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier						
Bis(2-ethylhexyl) phthalate	<0.20		1.63	1.83		mg/Kg	☼	113	72 - 131	3	30
Di-n-octyl phthalate	<0.20		1.63	1.53		mg/Kg	☼	94	68 - 134	4	30
Benzo[b]fluoranthene	0.017	J F1	1.63	2.24	F1	mg/Kg	☼	137	69 - 129	2	30
Benzo[k]fluoranthene	<0.040	F1	1.63	2.32	F1	mg/Kg	☼	143	68 - 127	3	30
Benzo[a]pyrene	<0.040		1.63	1.87		mg/Kg	☼	115	65 - 133	4	30
Indeno[1,2,3-cd]pyrene	<0.040		1.63	1.28		mg/Kg	☼	79	68 - 130	3	30
Dibenz(a,h)anthracene	<0.040	*	1.63	1.34		mg/Kg	☼	82	64 - 131	3	30
Benzo[g,h,i]perylene	0.017	J F1	1.63	1.10	F1	mg/Kg	☼	67	72 - 131	2	30
3 & 4 Methylphenol	<0.20	F1	1.63	1.85		mg/Kg	☼	114	57 - 120	17	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	138		31 - 166
Phenol-d5	129		30 - 153
Nitrobenzene-d5	104		37 - 147
2-Fluorobiphenyl	119		43 - 145
2,4,6-Tribromophenol	69		31 - 143
Terphenyl-d14	148		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-520763/1-A

Matrix: Solid

Analysis Batch: 521152

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 520763

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Barium	<1.0		1.0	0.11	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Beryllium	<0.40	^	0.40	0.093	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Boron	4.09	J	5.0	0.47	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Cadmium	0.0598	J	0.20	0.036	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Calcium	11.0	J	20	3.4	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Copper	<1.0		1.0	0.28	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Iron	<20	^	20	10	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Lead	<0.50		0.50	0.23	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Potassium	69.2		50	18	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Silver	<0.50		0.50	0.13	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Sodium	69.6	J	100	15	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/16/19 08:32	12/17/19 16:25	1
Zinc	1.34	J	2.0	0.88	mg/Kg		12/16/19 08:32	12/17/19 16:25	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-520763/1-A
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	7.28	J	10	5.0	mg/Kg		12/16/19 08:32	12/18/19 20:46	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/16/19 08:32	12/18/19 20:46	1

Lab Sample ID: LCS 500-520763/2-A
Matrix: Solid
Analysis Batch: 521152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	10.0	9.09		mg/Kg		91	80 - 120
Barium	200	193		mg/Kg		96	80 - 120
Beryllium	5.00	4.16	^	mg/Kg		83	80 - 120
Boron	100	86.7		mg/Kg		87	80 - 120
Cadmium	5.00	4.48		mg/Kg		90	80 - 120
Calcium	1000	881		mg/Kg		88	80 - 120
Chromium	20.0	18.5		mg/Kg		92	80 - 120
Cobalt	50.0	46.2		mg/Kg		92	80 - 120
Copper	25.0	23.7		mg/Kg		95	80 - 120
Iron	100	92.6	^	mg/Kg		93	80 - 120
Lead	10.0	8.80		mg/Kg		88	80 - 120
Nickel	50.0	46.0		mg/Kg		92	80 - 120
Potassium	1000	964		mg/Kg		96	80 - 120
Selenium	10.0	8.69		mg/Kg		87	80 - 120
Silver	5.00	4.43		mg/Kg		89	80 - 120
Sodium	1000	953		mg/Kg		95	80 - 120
Thallium	10.0	8.39		mg/Kg		84	80 - 120
Vanadium	50.0	46.3		mg/Kg		93	80 - 120
Zinc	50.0	45.6		mg/Kg		91	80 - 120

Lab Sample ID: LCS 500-520763/2-A
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Magnesium	1000	922		mg/Kg		92	80 - 120
Manganese	50.0	48.7		mg/Kg		97	80 - 120

Lab Sample ID: 500-174842-1 MS
Matrix: Solid
Analysis Batch: 521152

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.6		5.37	6.46		mg/Kg	☼	90	75 - 125
Barium	15		107	110		mg/Kg	☼	89	75 - 125
Boron	17	B F1	53.7	61.1		mg/Kg	☼	82	75 - 125
Cadmium	0.15	B	2.68	2.77		mg/Kg	☼	98	75 - 125
Chromium	4.7	F1	10.7	12.9		mg/Kg	☼	76	75 - 125
Cobalt	1.9		26.8	27.4		mg/Kg	☼	95	75 - 125
Potassium	1200	B F1	537	2150	F1	mg/Kg	☼	169	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174842-1 MS
Matrix: Solid
Analysis Batch: 521152

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Selenium	<0.54		5.37	4.75		mg/Kg	☼	88		75 - 125
Silver	0.75		2.68	3.52		mg/Kg	☼	103		75 - 125
Sodium	490	B	537	1030		mg/Kg	☼	100		75 - 125
Thallium	<0.54	F1	5.37	4.12		mg/Kg	☼	77		75 - 125
Vanadium	6.2		26.8	27.6		mg/Kg	☼	80		75 - 125

Lab Sample ID: 500-174842-1 MS
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Antimony	0.52	J F1	26.8	14.9	F1	mg/Kg	☼	54		75 - 125
Beryllium	0.19	J	2.68	2.62		mg/Kg	☼	91		75 - 125
Copper	5.9	B	13.4	19.3		mg/Kg	☼	100		75 - 125
Iron	3700		53.7	3510	4	mg/Kg	☼	-291		75 - 125
Manganese	140		26.8	169	4	mg/Kg	☼	94		75 - 125
Nickel	5.2		26.8	30.5		mg/Kg	☼	94		75 - 125
Zinc	21		26.8	46.2		mg/Kg	☼	93		75 - 125

Lab Sample ID: 500-174842-1 MS
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Calcium	170000	B	537	171000	4	mg/Kg	☼	832		75 - 125
Magnesium	94000	B	537	98500	4	mg/Kg	☼	773		75 - 125

Lab Sample ID: 500-174842-1 MS
Matrix: Solid
Analysis Batch: 521531

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Lead	15		5.37	20.5		mg/Kg	☼	95		75 - 125

Lab Sample ID: 500-174842-1 MSD
Matrix: Solid
Analysis Batch: 521152

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier								
Arsenic	1.6		5.47	6.68		mg/Kg	☼	93		75 - 125	3	20	
Barium	15		109	110		mg/Kg	☼	87		75 - 125	1	20	
Boron	17	B F1	54.7	57.5	F1	mg/Kg	☼	74		75 - 125	6	20	
Cadmium	0.15	B	2.73	2.82		mg/Kg	☼	98		75 - 125	2	20	
Chromium	4.7	F1	10.9	12.2	F1	mg/Kg	☼	69		75 - 125	5	20	
Cobalt	1.9		27.3	27.7		mg/Kg	☼	95		75 - 125	1	20	
Potassium	1200	B F1	547	2010	F1	mg/Kg	☼	139		75 - 125	7	20	
Selenium	<0.54		5.47	4.78		mg/Kg	☼	87		75 - 125	1	20	
Silver	0.75		2.73	3.60		mg/Kg	☼	104		75 - 125	2	20	
Sodium	490	B	547	1060		mg/Kg	☼	103		75 - 125	3	20	
Thallium	<0.54	F1	5.47	3.98	F1	mg/Kg	☼	73		75 - 125	3	20	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174842-1 MSD
Matrix: Solid
Analysis Batch: 521152

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	6.2		27.3	26.9		mg/Kg	☼	76	75 - 125	2	20

Lab Sample ID: 500-174842-1 MSD
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.52	J F1	27.3	15.8	F1	mg/Kg	☼	56	75 - 125	6	20
Beryllium	0.19	J	2.73	2.59		mg/Kg	☼	88	75 - 125	1	20
Copper	5.9	B	13.7	18.7		mg/Kg	☼	94	75 - 125	3	20
Iron	3700		54.7	3160	4	mg/Kg	☼	-911	75 - 125	10	20
Manganese	140		27.3	142	4	mg/Kg	☼	-7	75 - 125	17	20
Nickel	5.2		27.3	30.6		mg/Kg	☼	93	75 - 125	0	20
Zinc	21		27.3	44.7		mg/Kg	☼	86	75 - 125	3	20

Lab Sample ID: 500-174842-1 MSD
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	170000	B	547	181000	4	mg/Kg	☼	2716	75 - 125	6	20
Magnesium	94000	B	547	104000	4	mg/Kg	☼	1851	75 - 125	6	20

Lab Sample ID: 500-174842-1 MSD
Matrix: Solid
Analysis Batch: 521531

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	15		5.47	21.6		mg/Kg	☼	113	75 - 125	5	20

Lab Sample ID: 500-174842-1 DU
Matrix: Solid
Analysis Batch: 521152

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	1.6		1.12	F5	mg/Kg	☼	36	20
Barium	15		12.2		mg/Kg	☼	17	20
Boron	17	B F1	15.7		mg/Kg	☼	8	20
Cadmium	0.15	B	0.149		mg/Kg	☼	1	20
Chromium	4.7	F1	4.05		mg/Kg	☼	15	20
Cobalt	1.9		1.54		mg/Kg	☼	20	20
Potassium	1200	B F1	1100		mg/Kg	☼	12	20
Selenium	<0.54		<0.53		mg/Kg	☼	NC	20
Silver	0.75		0.667		mg/Kg	☼	12	20
Sodium	490	B	504		mg/Kg	☼	2	20
Thallium	<0.54	F1	<0.53		mg/Kg	☼	NC	20
Vanadium	6.2		8.76	F3	mg/Kg	☼	34	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174842-1 DU
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	0.52	J F1	0.234	J F5	mg/Kg	☼	75	20
Beryllium	0.19	J	0.182	J	mg/Kg	☼	4	20
Copper	5.9	B	4.90		mg/Kg	☼	18	20
Iron	3700		3110		mg/Kg	☼	16	20
Manganese	140		140		mg/Kg	☼	3	20
Nickel	5.2		4.52		mg/Kg	☼	14	20
Zinc	21		15.0	F3	mg/Kg	☼	34	20

Lab Sample ID: 500-174842-1 DU
Matrix: Solid
Analysis Batch: 521419

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Calcium	170000	B	166000		mg/Kg	☼	0.3	20
Magnesium	94000	B	95100		mg/Kg	☼	0.8	20

Lab Sample ID: 500-174842-1 DU
Matrix: Solid
Analysis Batch: 521531

Client Sample ID: 2615V2-01-B50 (0-5)
Prep Type: Total/NA
Prep Batch: 520763

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	15		11.6	F3	mg/Kg	☼	28	20

Lab Sample ID: LCS 500-522004/2-A
Matrix: Solid
Analysis Batch: 522179

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522004
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Beryllium	0.0500	0.0502		mg/L	100	80 - 120	
Boron	1.00	0.945		mg/L	95	80 - 120	
Cadmium	0.0500	0.0538		mg/L	108	80 - 120	
Chromium	0.200	0.207		mg/L	103	80 - 120	
Cobalt	0.500	0.537		mg/L	107	80 - 120	
Iron	1.00	1.06		mg/L	106	80 - 120	
Lead	0.100	0.0999		mg/L	100	80 - 120	
Manganese	0.500	0.494		mg/L	99	80 - 120	
Nickel	0.500	0.532		mg/L	106	80 - 120	
Selenium	0.100	0.106		mg/L	106	80 - 120	
Silver	0.0500	0.0544		mg/L	109	80 - 120	
Zinc	0.500	0.576		mg/L	115	80 - 120	

Lab Sample ID: LCS 500-522244/2-A
Matrix: Solid
Analysis Batch: 522410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522244
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Beryllium	0.0500	0.0485		mg/L	97	80 - 120	

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-522244/2-A
Matrix: Solid
Analysis Batch: 522410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522244

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.950		mg/L		95	80 - 120
Cadmium	0.0500	0.0530		mg/L		106	80 - 120
Chromium	0.200	0.203		mg/L		101	80 - 120
Cobalt	0.500	0.532		mg/L		106	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.0976		mg/L		98	80 - 120
Manganese	0.500	0.484		mg/L		97	80 - 120
Nickel	0.500	0.527		mg/L		105	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120
Silver	0.0500	0.0513		mg/L		103	80 - 120
Zinc	0.500	0.577		mg/L		115	80 - 120

Lab Sample ID: LCS 500-522364/2-A
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522364

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.0981		mg/L		98	80 - 120
Manganese	0.500	0.487		mg/L		97	80 - 120

Lab Sample ID: LB 500-521521/1-B
Matrix: Solid
Analysis Batch: 522179

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522004

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/22/19 16:45	12/23/19 10:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/22/19 16:45	12/23/19 10:19	1
Boron	<0.50		0.50	0.050	mg/L		12/22/19 16:45	12/23/19 10:19	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/22/19 16:45	12/23/19 10:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/22/19 16:45	12/23/19 10:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/22/19 16:45	12/23/19 10:19	1
Iron	<0.40		0.40	0.20	mg/L		12/22/19 16:45	12/23/19 10:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/22/19 16:45	12/23/19 10:19	1
Manganese	<0.025		0.025	0.010	mg/L		12/22/19 16:45	12/23/19 10:19	1
Nickel	<0.025		0.025	0.010	mg/L		12/22/19 16:45	12/23/19 10:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/22/19 16:45	12/23/19 10:19	1
Silver	<0.025		0.025	0.010	mg/L		12/22/19 16:45	12/23/19 10:19	1
Zinc	<0.50		0.50	0.020	mg/L		12/22/19 16:45	12/23/19 10:19	1

Lab Sample ID: LB 500-521521/1-C
Matrix: Solid
Analysis Batch: 522410

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522244

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 20:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:22	12/24/19 20:50	1
Boron	<0.50		0.50	0.050	mg/L		12/24/19 06:22	12/24/19 20:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:22	12/24/19 20:50	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 20:50	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-521521/1-C
Matrix: Solid
Analysis Batch: 522410

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522244

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 20:50	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:22	12/24/19 20:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:22	12/24/19 20:50	1
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 20:50	1
Nickel	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 20:50	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:22	12/24/19 20:50	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:22	12/24/19 20:50	1
Zinc	0.0236	J	0.50	0.020	mg/L		12/24/19 06:22	12/24/19 20:50	1

Lab Sample ID: 500-174842-14 MS
Matrix: Solid
Analysis Batch: 522410

Client Sample ID: 2615V2-01-B57 (39-47)
Prep Type: TCLP
Prep Batch: 522244

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Barium	0.32	J	0.500	0.724		mg/L		81	75 - 125
Beryllium	<0.0040		0.0500	0.0458		mg/L		92	75 - 125
Boron	1.2	F1	1.00	1.13	F1	mg/L		-11	75 - 125
Cadmium	<0.0050		0.0500	0.0520		mg/L		104	75 - 125
Chromium	<0.025		0.200	0.188		mg/L		94	75 - 125
Cobalt	0.039		0.500	0.556		mg/L		103	75 - 125
Iron	<0.40		1.00	1.02		mg/L		102	75 - 125
Lead	<0.0075		0.100	0.100		mg/L		100	75 - 125
Manganese	1.9		0.500	2.44		mg/L		101	75 - 125
Nickel	0.074		0.500	0.586		mg/L		103	75 - 125
Selenium	<0.050		0.100	0.105		mg/L		105	75 - 125
Silver	<0.025		0.0500	0.0506		mg/L		101	75 - 125
Zinc	0.25	J F1 B	0.500	0.579	F1	mg/L		65	75 - 125

Lab Sample ID: 500-174842-14 DU
Matrix: Solid
Analysis Batch: 522410

Client Sample ID: 2615V2-01-B57 (39-47)
Prep Type: TCLP
Prep Batch: 522244

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Barium	0.32	J	0.336	J	mg/L		4	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	1.2	F1	1.33		mg/L		7	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.039		0.0426		mg/L		9	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.9		2.05		mg/L		6	20
Nickel	0.074		0.0798		mg/L		8	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.25	J F1 B	0.277	J	mg/L		9	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-522172/1-B
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 522364

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 15:30	12/26/19 10:01	1
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 15:30	12/26/19 10:01	1

Lab Sample ID: 500-174842-14 MS
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: 2615V2-01-B57 (39-47)
Prep Type: SPLP East
Prep Batch: 522364

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Lead	<0.0075		0.100	0.0936		mg/L		94	75 - 125
Manganese	0.013	J	0.500	0.470		mg/L		91	75 - 125

Lab Sample ID: 500-174842-14 DU
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: 2615V2-01-B57 (39-47)
Prep Type: SPLP East
Prep Batch: 522364

Analyte	Sample Result	Sample Qualifier	DU Result	DU DU		Unit	D	RPD	RPD Limit
				Result	Qualifier				
Lead	<0.0075		<0.0075			mg/L		NC	20
Manganese	0.013	J	0.0116	J		mg/L		8	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-522004/2-A
Matrix: Solid
Analysis Batch: 522196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522004

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Antimony	0.500	0.507		mg/L		101	80 - 120
Thallium	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: LCS 500-522244/2-A
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522244

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Antimony	0.500	0.510		mg/L		102	80 - 120
Thallium	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: LB 500-521521/1-B
Matrix: Solid
Analysis Batch: 522196

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522004

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0060		0.0060	0.0060	mg/L		12/22/19 16:45	12/23/19 14:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/22/19 16:45	12/23/19 14:05	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LB 500-521521/1-C
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522244

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:22	12/26/19 13:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:22	12/26/19 13:43	1

Lab Sample ID: 500-174842-14 MS
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-01-B57 (39-47)
Prep Type: TCLP
Prep Batch: 522244

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0060		0.500	0.501		mg/L		100	75 - 125
Thallium	<0.0020		0.100	0.102		mg/L		102	75 - 125

Lab Sample ID: 500-174842-14 DU
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-01-B57 (39-47)
Prep Type: TCLP
Prep Batch: 522244

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-522309/12-A
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 08:38	1

Lab Sample ID: LCS 500-522309/15-A
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00196		mg/L		98	80 - 120

Lab Sample ID: LB 500-521521/1-D
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522309

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 11:25	1

Lab Sample ID: 500-174842-6 MS
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: 2615V2-01-B50 (31-39)
Prep Type: TCLP
Prep Batch: 522309

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00105		mg/L		104	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-174842-6 DU
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: 2615V2-01-B50 (31-39)
Prep Type: TCLP
Prep Batch: 522309

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-521060/12-A
Matrix: Solid
Analysis Batch: 521278

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/17/19 14:35	12/18/19 07:23	1

Lab Sample ID: LCS 500-521060/13-A
Matrix: Solid
Analysis Batch: 521278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521060

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.165		mg/Kg		99	80 - 120

Lab Sample ID: 500-174842-9 MS
Matrix: Solid
Analysis Batch: 521278

Client Sample ID: 2615V2-01-B57 (5-10)
Prep Type: Total/NA
Prep Batch: 521060

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.0074	J	0.0972	0.0985		mg/Kg	☼	94	75 - 125

Lab Sample ID: 500-174842-9 MSD
Matrix: Solid
Analysis Batch: 521278

Client Sample ID: 2615V2-01-B57 (5-10)
Prep Type: Total/NA
Prep Batch: 521060

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.0074	J	0.0975	0.0998		mg/Kg	☼	95	75 - 125	1	20

Lab Sample ID: 500-174842-9 DU
Matrix: Solid
Analysis Batch: 521278

Client Sample ID: 2615V2-01-B57 (5-10)
Prep Type: Total/NA
Prep Batch: 521060

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.0074	J	0.0142	J F5	mg/Kg	☼	63	20

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B50 (0-5)

Lab Sample ID: 500-174842-1

Date Collected: 12/10/19 09:50

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:09	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	522179	12/23/19 11:42	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	522196	12/23/19 14:10	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 08:52	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B50 (0-5)

Lab Sample ID: 500-174842-1

Date Collected: 12/10/19 09:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 00:06	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 12:35	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 16:37	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521531	12/19/19 09:51	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 20:59	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 21:03	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:31	MJG	TAL CHI

Client Sample ID: 2615V2-01-B50 (5-10)

Lab Sample ID: 500-174842-2

Date Collected: 12/10/19 10:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:25	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	522179	12/23/19 11:46	EEN	TAL CHI

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Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B50 (5-10)

Lab Sample ID: 500-174842-2

Date Collected: 12/10/19 10:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	522196	12/23/19 14:12	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 08:53	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B50 (5-10)

Lab Sample ID: 500-174842-2

Date Collected: 12/10/19 10:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 00:31	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521795	12/20/19 22:14	NRJ	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:06	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 21:50	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 21:54	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:33	MJG	TAL CHI

Client Sample ID: 2615V2-01-B50 (10-15)

Lab Sample ID: 500-174842-3

Date Collected: 12/10/19 10:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:30	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	522179	12/23/19 11:51	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	522196	12/23/19 14:15	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 08:55	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B50 (10-15)

Lab Sample ID: 500-174842-3

Date Collected: 12/10/19 10:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 00:57	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521795	12/20/19 22:43	NRJ	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:10	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 21:58	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 22:02	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:36	MJG	TAL CHI

Client Sample ID: 2615V2-01-B50 (15-23)

Lab Sample ID: 500-174842-4

Date Collected: 12/10/19 10:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:34	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	522179	12/23/19 11:55	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	522196	12/23/19 14:17	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 08:57	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B50 (15-23)

Lab Sample ID: 500-174842-4

Date Collected: 12/10/19 10:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 01:22	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 13:05	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:14	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 22:06	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B50 (15-23)

Lab Sample ID: 500-174842-4

Date Collected: 12/10/19 10:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 22:11	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:38	MJG	TAL CHI

Client Sample ID: 2615V2-01-B50 (23-31)

Lab Sample ID: 500-174842-5

Date Collected: 12/10/19 10:35

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:37	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	522179	12/23/19 12:07	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	522196	12/23/19 14:20	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 08:58	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B50 (23-31)

Lab Sample ID: 500-174842-5

Date Collected: 12/10/19 10:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 01:48	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 13:35	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:18	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 22:15	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 22:27	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:40	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B50 (31-39)

Lab Sample ID: 500-174842-6

Date Collected: 12/10/19 10:45

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:41	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6010B		1	522179	12/23/19 12:11	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522004	12/22/19 16:45	BDE	TAL CHI
TCLP	Analysis	6020A		1	522196	12/23/19 14:22	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:00	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B50 (31-39)

Lab Sample ID: 500-174842-6

Date Collected: 12/10/19 10:45

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 02:13	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521795	12/21/19 00:13	NRJ	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:22	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 22:32	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 22:36	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:46	MJG	TAL CHI

Client Sample ID: 2615V2-01-B50 (39-47)

Lab Sample ID: 500-174842-7

Date Collected: 12/10/19 10:55

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:45	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:11	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:47	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B50 (39-47)

Lab Sample ID: 500-174842-7

Date Collected: 12/10/19 10:55

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:08	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B50 (39-47)

Lab Sample ID: 500-174842-7

Date Collected: 12/10/19 10:55

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 02:39	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 14:05	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:26	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 22:40	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 22:44	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:48	MJG	TAL CHI

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:49	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:15	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:50	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:10	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 03:05	PMF	TAL CHI
Total/NA	Prep	3541	DL		521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D	DL	2	522273	12/24/19 14:34	AJD	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521795	12/21/19 01:12	NRJ	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:30	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 22:48	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 22:53	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:50	MJG	TAL CHI

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:53	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:19	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:52	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:12	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 03:30	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 15:04	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:34	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 22:57	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 07:53	MJG	TAL CHI

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 10:57	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:23	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:54	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:13	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 03:55	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 15:34	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:38	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 23:01	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 23:05	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 08:01	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 11:02	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:28	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:56	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:15	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 04:21	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521795	12/21/19 02:40	NRJ	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:43	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 23:18	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 23:22	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 08:03	MJG	TAL CHI

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 11:14	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:32	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 14:03	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:17	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 04:46	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 11:37	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:55	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 23:26	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 23:30	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 08:05	MJG	TAL CHI

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 11:18	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:36	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 14:06	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:18	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 05:11	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 12:06	AJD	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 17:59	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 23:35	EEN	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 23:39	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 08:12	MJG	TAL CHI

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522172	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522364	12/24/19 15:30	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 11:22	JEF	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6010B		1	522410	12/24/19 21:41	EEN	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522244	12/24/19 06:22	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 14:08	FXG	TAL CHI
TCLP	Leach	1311			521521	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522309	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:20	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	520814	12/16/19 11:31	LWN	TAL CHI

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520642	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521534	12/20/19 05:37	PMF	TAL CHI
Total/NA	Prep	3541			521361	12/18/19 16:35	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521795	12/21/19 04:09	NRJ	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521152	12/17/19 18:03	JEF	TAL CHI
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		1	521419	12/18/19 23:43	EEN	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.8

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3050B			520763	12/16/19 08:32	LMN	TAL CHI
Total/NA	Analysis	6010B		10	521419	12/18/19 23:47	EEN	TAL CHI
Total/NA	Prep	7471B			521060	12/17/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521278	12/18/19 08:14	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL
Phone: 708.534.5200 Fax: 708.534.5201



500-174842 COC

Report To (optional) Dean Tiebout
Contact: Dean Tiebout
Company: E+E
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional) Dean Tiebout
Contact: Mike Fischer
Company: E+E
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174842

Chain of Custody Number: _____

Page 1 of 2

Temperature °C of Cooler: 4.3 12/10/19

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TCLP METALS	Preservative	Parameter	Comments
			Date	Time									
1		2615V2-01-B50 (0-5)	12-10-19	0950	5	S	X	X	X	X			
2		(5-10)		1000									
3		(10-15)		1015									
4		(15-23)		1025									
5		(23-31)		1035									
6		(31-39)		1045									
7		(39-47)		1055									
8	26	-B57 (0-5)		1145									
9		(5-10)		1150									
10		(10-15)		1200									

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>M. Fischer</u> Company: <u>EDI</u> Date: <u>12/10/19</u> Time: <u>1430</u>	Received By: <u>Dean Tiebout</u> Company: <u>TA</u> Date: <u>12/10/19</u> Time: <u>1930</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>P. Neal</u> Company: <u>TA</u> Date: <u>12/10/19</u> Time: <u>1525</u>	Received By: <u>Dean Tiebout</u> Company: <u>TA</u> Date: <u>12/10/19</u> Time: <u>1525</u>	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: <u>X</u>

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Dean Tiebout
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional) Dean Tiebout
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174842
 Chain of Custody Number: _____
 Page 2 of 2
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter												Preservative Key	
<u>EDI</u>		<u>0945-028</u>																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM											
<u>IDOT 176-001 WO 47E</u>		<u>Chicago, IL</u>				<u>Mike Fischer</u>		<u>Richard Wright</u>											
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TCLP METALS								
		Date	Time																
<u>11</u>		<u>2615v2-01-B57(15-23)</u>		<u>12/10/19</u>	<u>1205</u>	<u>5</u>	<u>SO</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>12</u>		<u>L (27-31)</u>		<u>L</u>	<u>1215</u>	<u> </u>	<u> </u>	<u>I</u>	<u>I</u>	<u>I</u>	<u>I</u>								
<u>13</u>		<u>L (31-39)</u>		<u>L</u>	<u>1225</u>	<u> </u>	<u> </u>	<u>I</u>	<u>I</u>	<u>I</u>	<u>I</u>								
<u>14</u>		<u>L (39-47)</u>		<u>L</u>	<u>1235</u>	<u> </u>	<u> </u>	<u>I</u>	<u>I</u>	<u>I</u>	<u>I</u>								

Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other
 Requested Due Date: _____

Sample Disposal
 Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>MAD</u> Company <u>EDI</u> Date <u>12/10/19</u> Time <u>1430</u>	Received By <u>[Signature]</u> Company <u>[Signature]</u> Date <u>12/10/19</u> Time <u>1430</u>	Lab Courier <u>TA</u>
Relinquished By <u>P. Neal</u> Company <u>TA</u> Date <u>12/10/19</u> Time <u>1525</u>	Received By <u>[Signature]</u> Company <u>TA</u> Date <u>12/10/19</u> Time <u>1525</u>	Shipped _____
Relinquished By _____ Company _____ Date _____ Time _____	Received By _____ Company _____ Date _____ Time _____	Hand Delivered _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174842-1

Login Number: 174842

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6,3.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174842-2
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
1/9/2020 4:35:09 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

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TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Job ID: 500-174842-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174842-2

Comments

No additional comments.

Receipt

The samples were received on 12/10/2019 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 4.6° C.

General Chemistry

Method 9045D: The following pH samples was analyzed outside of analytical holding time due to Client request: 2615V2-01-B50 (0-5) (500-174842-1), 2615V2-01-B50 (5-10) (500-174842-2), 2615V2-01-B50 (10-15) (500-174842-3), 2615V2-01-B50 (15-23) (500-174842-4), 2615V2-01-B50 (23-31) (500-174842-5), 2615V2-01-B50 (31-39) (500-174842-6), 2615V2-01-B50 (39-47) (500-174842-7), 2615V2-01-B57 (0-5) (500-174842-8), 2615V2-01-B57 (5-10) (500-174842-9), 2615V2-01-B57 (10-15) (500-174842-10), 2615V2-01-B57 (15-23) (500-174842-11), 2615V2-01-B57 (23-31) (500-174842-12), 2615V2-01-B57 (31-39) (500-174842-13) and 2615V2-01-B57 (39-47) (500-174842-14).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

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Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
pH	7.6		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
pH	7.4		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
pH	7.2		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
pH	7.8		0.2	0.2	SU	1			9045D	Total/NA

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
pH	7.9		0.2	0.2	SU	1			9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.6		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174842-8	2615V2-01-B57 (0-5)	Solid	12/10/19 11:45	12/10/19 15:25	
500-174842-9	2615V2-01-B57 (5-10)	Solid	12/10/19 11:50	12/10/19 15:25	
500-174842-10	2615V2-01-B57 (10-15)	Solid	12/10/19 12:00	12/10/19 15:25	
500-174842-11	2615V2-01-B57 (15-23)	Solid	12/10/19 12:05	12/10/19 15:25	
500-174842-12	2615V2-01-B57 (23-31)	Solid	12/10/19 12:15	12/10/19 15:25	
500-174842-13	2615V2-01-B57 (31-39)	Solid	12/10/19 12:25	12/10/19 15:25	
500-174842-14	2615V2-01-B57 (39-47)	Solid	12/10/19 12:35	12/10/19 15:25	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			01/07/20 14:21	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.2	0.2	SU			01/07/20 14:27	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.2		0.2	0.2	SU			01/07/20 14:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU			01/07/20 14:43	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			01/07/20 14:54	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			01/07/20 15:00	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.2	0.2	SU			01/07/20 15:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

General Chemistry

Analysis Batch: 523730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174842-1	2615V2-01-B50 (0-5)	Total/NA	Solid	9045D	
500-174842-2	2615V2-01-B50 (5-10)	Total/NA	Solid	9045D	
500-174842-3	2615V2-01-B50 (10-15)	Total/NA	Solid	9045D	
500-174842-4	2615V2-01-B50 (15-23)	Total/NA	Solid	9045D	
500-174842-5	2615V2-01-B50 (23-31)	Total/NA	Solid	9045D	
500-174842-6	2615V2-01-B50 (31-39)	Total/NA	Solid	9045D	
500-174842-7	2615V2-01-B50 (39-47)	Total/NA	Solid	9045D	
500-174842-8	2615V2-01-B57 (0-5)	Total/NA	Solid	9045D	
500-174842-9	2615V2-01-B57 (5-10)	Total/NA	Solid	9045D	
500-174842-10	2615V2-01-B57 (10-15)	Total/NA	Solid	9045D	
500-174842-11	2615V2-01-B57 (15-23)	Total/NA	Solid	9045D	
500-174842-12	2615V2-01-B57 (23-31)	Total/NA	Solid	9045D	
500-174842-13	2615V2-01-B57 (31-39)	Total/NA	Solid	9045D	
500-174842-14	2615V2-01-B57 (39-47)	Total/NA	Solid	9045D	
LCS 500-523730/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-523730/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-174842-2 DU	2615V2-01-B50 (5-10)	Total/NA	Solid	9045D	
500-174842-11 DU	2615V2-01-B57 (15-23)	Total/NA	Solid	9045D	

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Method: 9045D - pH

Lab Sample ID: 500-174842-2 DU
Matrix: Solid
Analysis Batch: 523730

Client Sample ID: 2615V2-01-B50 (5-10)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.6		7.6		SU		0.1	

Lab Sample ID: 500-174842-11 DU
Matrix: Solid
Analysis Batch: 523730

Client Sample ID: 2615V2-01-B57 (15-23)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.8		7.9		SU		0.3	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B50 (0-5)

Lab Sample ID: 500-174842-1

Date Collected: 12/10/19 09:50

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 13:38 01/07/20 13:43	SMO	TAL CHI

Client Sample ID: 2615V2-01-B50 (5-10)

Lab Sample ID: 500-174842-2

Date Collected: 12/10/19 10:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 13:43 01/07/20 13:49	SMO	TAL CHI

Client Sample ID: 2615V2-01-B50 (10-15)

Lab Sample ID: 500-174842-3

Date Collected: 12/10/19 10:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 13:54 01/07/20 14:00	SMO	TAL CHI

Client Sample ID: 2615V2-01-B50 (15-23)

Lab Sample ID: 500-174842-4

Date Collected: 12/10/19 10:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:00 01/07/20 14:05	SMO	TAL CHI

Client Sample ID: 2615V2-01-B50 (23-31)

Lab Sample ID: 500-174842-5

Date Collected: 12/10/19 10:35

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:05 01/07/20 14:11	SMO	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B50 (31-39)

Lab Sample ID: 500-174842-6

Date Collected: 12/10/19 10:45

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:11 01/07/20 14:16	SMO	TAL CHI

Client Sample ID: 2615V2-01-B50 (39-47)

Lab Sample ID: 500-174842-7

Date Collected: 12/10/19 10:55

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:16 01/07/20 14:21	SMO	TAL CHI

Client Sample ID: 2615V2-01-B57 (0-5)

Lab Sample ID: 500-174842-8

Date Collected: 12/10/19 11:45

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:21 01/07/20 14:27	SMO	TAL CHI

Client Sample ID: 2615V2-01-B57 (5-10)

Lab Sample ID: 500-174842-9

Date Collected: 12/10/19 11:50

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:27 01/07/20 14:32	SMO	TAL CHI

Client Sample ID: 2615V2-01-B57 (10-15)

Lab Sample ID: 500-174842-10

Date Collected: 12/10/19 12:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:38 01/07/20 14:43	SMO	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Client Sample ID: 2615V2-01-B57 (15-23)

Lab Sample ID: 500-174842-11

Date Collected: 12/10/19 12:05

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:43 (Start) 01/07/20 14:49 (End)	SMO	TAL CHI

Client Sample ID: 2615V2-01-B57 (23-31)

Lab Sample ID: 500-174842-12

Date Collected: 12/10/19 12:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 14:54 (Start) 01/07/20 15:00 (End)	SMO	TAL CHI

Client Sample ID: 2615V2-01-B57 (31-39)

Lab Sample ID: 500-174842-13

Date Collected: 12/10/19 12:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 15:00 (Start) 01/07/20 15:05 (End)	SMO	TAL CHI

Client Sample ID: 2615V2-01-B57 (39-47)

Lab Sample ID: 500-174842-14

Date Collected: 12/10/19 12:35

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	523730	01/07/20 15:05 (Start) 01/07/20 15:11 (End)	SMO	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174842-2

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
-----------------	-------------	--------	---------

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL
Phone: 708.534.5200 Fax: 708.534.5201



500-174842 COC

Report To (optional) Dean Tiebout
Contact: Dean Tiebout
Company: E+E
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional) Dean Tiebout
Contact: Mike Fischer
Company: E+E
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174842

Chain of Custody Number: _____

Page 1 of 2

Temperature °C of Cooler: 4.6, 3.2, 4.5
12/10/19

Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TCLP METALS	Preservative	Parameter	Comments
			Date	Time									
1		2615V2-01-B50 (0-5)	12-10-19	0950	5	S	X	X	X	X			
2		(5-10)		1000									
3		(10-15)		1015									
4		(15-23)		1025									
5		(23-31)		1035									
6		(31-39)		1045									
7		(39-47)		1055									
8	26	-B57 (0-5)		1145									
9		(5-10)		1150									
10		(10-15)		1200									

- Preservative Key
1. HCL, Cool to 4°
 2. H2SO4, Cool to 4°
 3. HNO3, Cool to 4°
 4. NaOH, Cool to 4°
 5. NaOH/Zn, Cool to 4°
 6. NaHSO4
 7. Cool to 4°
 8. None
 9. Other

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>M. Fischer</u> Company: <u>EDI</u> Date: <u>12/10/19</u> Time: <u>1430</u>	Received By: <u>Dean Tiebout</u> Company: <u>TA</u> Date: <u>12/10/19</u> Time: <u>1930</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>P. Neal</u> Company: <u>TA</u> Date: <u>12/10/19</u> Time: <u>1525</u>	Received By: <u>Dean Tiebout</u> Company: <u>TA</u> Date: <u>12/10/19</u> Time: <u>1525</u>	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: <u>X</u>

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) Dean Tiebout
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional) Dean Tiebout
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-174842
 Chain of Custody Number: _____
 Page 2 of 2
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Lab Project #		Sampling		Containers		Matrix		
Project Location/State		Lab PM		Date	Time	# of Containers	Matrix	Matrix		
Lab ID	MS/MSD	Sample ID						Matrix		
EDI		0945-028								VOCs SVOCs TOTAL METALS TCLP METALS
IDOT 176-001 WO 47E										
Chicago, IL		Richard Wright								
Mike Fischer										
11		2615v2-01-B57(15-23)	12/10/19	1205	5	SO	X	X	X	X
12		(27-31)		1215			I	I	I	I
13		(31-39)		1225			I	I	I	I
14		(39-47)		1235			I	I	I	I

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Requested Due Date: _____

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>M. New</u>	Company: <u>EDI</u>	Date: <u>12/10/19</u>	Time: <u>1430</u>	Received By: <u>[Signature]</u>	Company: <u>[Signature]</u>	Date: <u>12/10/19</u>	Time: <u>1430</u>
Relinquished By: <u>P. New</u>	Company: <u>[Signature]</u>	Date: <u>12/10/19</u>	Time: <u>1525</u>	Received By: <u>[Signature]</u>	Company: <u>[Signature]</u>	Date: <u>12/10/19</u>	Time: <u>1525</u>

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments: _____
 Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174842-2

Login Number: 174842

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6,3.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174843-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/27/2019 11:37:58 AM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Job ID: 500-174843-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174843-1

Receipt

The samples were received on 12/10/2019 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

GC/MS VOA

Method 8260B: Internal standard (1,4-Dichlorobenzene-d4) and surrogate standard (4-Bromofluorobenzene) responses were outside of acceptance limits for the following sample: 2615V2-262-B01 (39-47) (500-174843-8). No analytes associated with this internal standard and surrogate standard were detected: therefore the results were reported.

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for 521439 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased low in the LCS/ LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 521351 had 3 analytes outside control limits: 2,4-Dinitrophenol, Nitrobenzene and Phenol. These results have been reported and qualified. (LCS 500-521351/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0073	J	0.016	0.0070	mg/Kg	1	☼	8260B	Total/NA
Benzene	0.00045	J	0.0016	0.00041	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.031	J	0.038	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.033	J	0.076	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.033	J	0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.034	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.33		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.064		0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.34		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.32		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.14		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.16		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.19		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.069		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.062		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.024	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.071		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.6		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	16	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	82000		110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.5		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	44000		54	27	mg/Kg	10	☼	6010B	Total/NA
Manganese	220		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.7	B	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.67		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.52		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.0077		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.085		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.037	B	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.034		0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.030	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.050		0.041	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.24		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.024	J	0.041	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.030	J	0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.040	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0	B	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	720		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.97		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024	B	0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.010	J	0.019	0.0082	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.090		0.085	0.0077	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.048		0.042	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.21		0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.035	J	0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.043		0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.038	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15) (Continued)

Lab Sample ID: 500-174843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	20	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		30	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.96		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.080	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.052		0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.10		0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.048		0.040	0.0073	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.037	J	0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.21		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.021	J	0.040	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038	J	0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.2		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	20	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23) (Continued)

Lab Sample ID: 500-174843-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.64		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	72		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.37	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.032	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.053		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.018	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.058	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.037	J	0.041	0.0074	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.034	J	0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.6		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.72		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	20	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31) (Continued)

Lab Sample ID: 500-174843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.022	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.029	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.051		0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.059	J	0.19	0.044	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.30		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.043		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.034	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	11		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	18		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	13	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	38		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.53	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.75		0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	1.4	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.53	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.065		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.025	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.039		0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.030	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Arsenic	10		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D (Continued)

Lab Sample ID: 500-174843-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.24	B	0.12	0.021	mg/Kg	1	*	6010B	Total/NA
Calcium	55000		120	20	mg/Kg	10	*	6010B	Total/NA
Chromium	14		0.58	0.29	mg/Kg	1	*	6010B	Total/NA
Cobalt	15		0.29	0.076	mg/Kg	1	*	6010B	Total/NA
Copper	33		0.58	0.16	mg/Kg	1	*	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	*	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	*	6010B	Total/NA
Magnesium	25000		5.8	2.9	mg/Kg	1	*	6010B	Total/NA
Manganese	350		0.58	0.085	mg/Kg	1	*	6010B	Total/NA
Nickel	37		0.58	0.17	mg/Kg	1	*	6010B	Total/NA
Potassium	2700		29	10	mg/Kg	1	*	6010B	Total/NA
Selenium	0.74		0.58	0.34	mg/Kg	1	*	6010B	Total/NA
Silver	1.8	B	0.29	0.075	mg/Kg	1	*	6010B	Total/NA
Sodium	180		58	8.6	mg/Kg	1	*	6010B	Total/NA
Thallium	1.3		0.58	0.29	mg/Kg	1	*	6010B	Total/NA
Vanadium	18		0.29	0.069	mg/Kg	1	*	6010B	Total/NA
Zinc	58		1.2	0.51	mg/Kg	1	*	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.044		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.00046		0.00020	0.00020	mg/L	1		7470A	TCLP
Mercury	0.026		0.019	0.0063	mg/Kg	1	*	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.044		0.038	0.0068	mg/Kg	1	*	8270D	Total/NA
Phenanthrene	0.26		0.038	0.0053	mg/Kg	1	*	8270D	Total/NA
Pyrene	0.036	J	0.038	0.0075	mg/Kg	1	*	8270D	Total/NA
Chrysene	0.038		0.038	0.010	mg/Kg	1	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.038	0.012	mg/Kg	1	*	8270D	Total/NA
Antimony	0.26	J	1.1	0.21	mg/Kg	1	*	6010B	Total/NA
Arsenic	13		0.54	0.18	mg/Kg	1	*	6010B	Total/NA
Barium	12		0.54	0.061	mg/Kg	1	*	6010B	Total/NA
Beryllium	0.33		0.21	0.050	mg/Kg	1	*	6010B	Total/NA
Boron	9.5	B	2.7	0.25	mg/Kg	1	*	6010B	Total/NA
Cadmium	0.34	B	0.11	0.019	mg/Kg	1	*	6010B	Total/NA
Calcium	72000		110	18	mg/Kg	10	*	6010B	Total/NA
Chromium	7.2		0.54	0.27	mg/Kg	1	*	6010B	Total/NA
Cobalt	11		0.27	0.070	mg/Kg	1	*	6010B	Total/NA
Copper	37		0.54	0.15	mg/Kg	1	*	6010B	Total/NA
Iron	17000		11	5.6	mg/Kg	1	*	6010B	Total/NA
Lead	18		0.27	0.12	mg/Kg	1	*	6010B	Total/NA
Magnesium	39000		54	27	mg/Kg	10	*	6010B	Total/NA
Manganese	450		0.54	0.078	mg/Kg	1	*	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	*	6010B	Total/NA
Potassium	1300		27	9.5	mg/Kg	1	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47) (Continued)

Lab Sample ID: 500-174843-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.88		0.54	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	1.3	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		54	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	63		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.81	F1	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.076		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.012	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174843-1	2615V2-262-B01 (0-5)	Solid	12/10/19 13:15	12/10/19 15:25	
500-174843-2	2615V2-262-B01 (5-10)	Solid	12/10/19 13:25	12/10/19 15:25	
500-174843-3	2615V2-262-B01 (10-15)	Solid	12/10/19 13:30	12/10/19 15:25	
500-174843-4	2615V2-262-B01 (15-23)	Solid	12/10/19 13:40	12/10/19 15:25	
500-174843-5	2615V2-262-B01 (23-31)	Solid	12/10/19 13:50	12/10/19 15:25	
500-174843-6	2615V2-262-B01 (31-39)	Solid	12/10/19 14:00	12/10/19 15:25	
500-174843-7	2615V2-262-B01 (31-39)D	Solid	12/10/19 14:00	12/10/19 15:25	
500-174843-8	2615V2-262-B01 (39-47)	Solid	12/10/19 14:15	12/10/19 15:25	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Acetone	0.0073	J	0.016	0.0070	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Benzene	0.00045	J	0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	12/11/19 19:47	12/19/19 15:39	1
4-Bromofluorobenzene (Surr)	108		75 - 131	12/11/19 19:47	12/19/19 15:39	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 15:39	1
Toluene-d8 (Surr)	95		75 - 124	12/11/19 19:47	12/19/19 15:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Naphthalene	0.031	J	0.038	0.0058	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Methylnaphthalene	0.033	J	0.076	0.0070	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Acenaphthene	0.033	J	0.038	0.0068	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Fluorene	0.034	J	0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Phenanthrene	0.33		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Anthracene	0.064		0.038	0.0063	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Fluoranthene	0.34		0.038	0.0070	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Pyrene	0.32		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[a]anthracene	0.14		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.16		0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[b]fluoranthene	0.19		0.038	0.0082	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[k]fluoranthene	0.069		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[a]pyrene	0.13		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Indeno[1,2,3-cd]pyrene	0.062		0.038	0.0098	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Dibenz(a,h)anthracene	0.024	J	0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[g,h,i]perylene	0.071		0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	129		31 - 166				12/18/19 16:01	12/24/19 11:07	1
Phenol-d5	111		30 - 153				12/18/19 16:01	12/24/19 11:07	1
Nitrobenzene-d5	89		37 - 147				12/18/19 16:01	12/24/19 11:07	1
2-Fluorobiphenyl	97		43 - 145				12/18/19 16:01	12/24/19 11:07	1
2,4,6-Tribromophenol	60		31 - 143				12/18/19 16:01	12/24/19 11:07	1
Terphenyl-d14	147		42 - 157				12/18/19 16:01	12/24/19 11:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Arsenic	4.6		0.54	0.19	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Barium	37		0.54	0.062	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Beryllium	0.55		0.22	0.051	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Boron	16	B	2.7	0.25	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Cadmium	0.23	B	0.11	0.019	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Calcium	82000		110	18	mg/Kg	☼	12/17/19 17:12	12/19/19 10:58	10
Chromium	14		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Cobalt	9.5		0.27	0.071	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Copper	23		0.54	0.15	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Iron	13000		11	5.6	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Lead	42		0.27	0.12	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Magnesium	44000		54	27	mg/Kg	☼	12/17/19 17:12	12/19/19 10:58	10
Manganese	220		0.54	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Nickel	24		0.54	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Potassium	2500		27	9.6	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Selenium	0.41	J	0.54	0.32	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Silver	1.7	B	0.27	0.070	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Sodium	640		54	8.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Thallium	0.67		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Vanadium	17		0.27	0.064	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Zinc	58		1.1	0.47	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.52		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:06	1
Boron	0.087	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:06	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:06	1
Lead	0.0077		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:06	1
Manganese	1.6		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Nickel	0.037		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:06	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Zinc	0.023	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:06	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.085		0.0075	0.0075	mg/L		12/24/19 15:32	12/26/19 08:47	1
Manganese	0.36		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:47	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:13	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	B	0.018	0.0061	mg/Kg	☼	12/18/19 14:15	12/19/19 07:54	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Acetone	0.034		0.019	0.0081	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	12/11/19 19:47	12/19/19 16:04	1
4-Bromofluorobenzene (Surr)	112		75 - 131	12/11/19 19:47	12/19/19 16:04	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 16:04	1
Toluene-d8 (Surr)	95		75 - 124	12/11/19 19:47	12/19/19 16:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Methylnaphthalene	0.030	J	0.082	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Acenaphthene	0.050		0.041	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Phenanthrene	0.24		0.041	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Anthracene	0.024	J	0.041	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Fluoranthene	0.030	J	0.041	0.0076	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Pyrene	0.040	J	0.041	0.0081	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		31 - 166				12/18/19 16:01	12/21/19 21:01	1
Phenol-d5	93		30 - 153				12/18/19 16:01	12/21/19 21:01	1
Nitrobenzene-d5	79		37 - 147				12/18/19 16:01	12/21/19 21:01	1
2-Fluorobiphenyl	103		43 - 145				12/18/19 16:01	12/21/19 21:01	1
2,4,6-Tribromophenol	47		31 - 143				12/18/19 16:01	12/21/19 21:01	1
Terphenyl-d14	115		42 - 157				12/18/19 16:01	12/21/19 21:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Arsenic	6.9		0.57	0.20	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Barium	34		0.57	0.065	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Beryllium	0.68		0.23	0.054	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Boron	17	B	2.9	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Cadmium	0.17	B	0.11	0.021	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Calcium	58000		110	19	mg/Kg	☼	12/17/19 17:12	12/19/19 11:02	10
Chromium	16		0.57	0.28	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Cobalt	13		0.29	0.075	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Copper	28		0.57	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Iron	18000		11	6.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Lead	14		0.29	0.13	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Magnesium	25000		5.7	2.8	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Manganese	320		0.57	0.083	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Nickel	35		0.57	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Potassium	3200		29	10	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Selenium	0.63		0.57	0.34	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Silver	2.0	B	0.29	0.074	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Sodium	720		57	8.5	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Thallium	0.97		0.57	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Zinc	48		1.1	0.50	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.39	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:10	1
Boron	0.070	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:10	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Cobalt	0.011	J	0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:10	1
Manganese	1.4		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Nickel	0.030		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:10	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:10	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	B	0.020	0.0068	mg/Kg	☼	12/18/19 14:15	12/19/19 07:56	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Acetone	0.010	J	0.019	0.0082	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chloroethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 16:30	1
4-Bromofluorobenzene (Surr)	101		75 - 131	12/11/19 19:47	12/19/19 16:30	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 16:30	1
Toluene-d8 (Surr)	102		75 - 124	12/11/19 19:47	12/19/19 16:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Nitrobenzene	<0.042	*	0.042	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Methylnaphthalene	0.090		0.085	0.0077	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dinitrophenol	<0.85	*	0.85	0.74	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Acenaphthene	0.048		0.042	0.0076	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Phenanthrene	0.21		0.042	0.0059	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Fluoranthene	0.035	J	0.042	0.0078	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Pyrene	0.043		0.042	0.0084	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzof[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.038	J	0.042	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		31 - 166				12/18/19 16:01	12/21/19 21:31	1
Phenol-d5	95		30 - 153				12/18/19 16:01	12/21/19 21:31	1
Nitrobenzene-d5	78		37 - 147				12/18/19 16:01	12/21/19 21:31	1
2-Fluorobiphenyl	100		43 - 145				12/18/19 16:01	12/21/19 21:31	1
2,4,6-Tribromophenol	48		31 - 143				12/18/19 16:01	12/21/19 21:31	1
Terphenyl-d14	116		42 - 157				12/18/19 16:01	12/21/19 21:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Arsenic	6.9		0.60	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Barium	41		0.60	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Beryllium	0.70		0.24	0.056	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Boron	20	B	3.0	0.28	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Cadmium	0.16	B	0.12	0.022	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Calcium	57000		120	20	mg/Kg	☼	12/17/19 17:12	12/19/19 11:06	10
Chromium	17		0.60	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Cobalt	14		0.30	0.079	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Copper	25		0.60	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Iron	19000		12	6.2	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Lead	13		0.30	0.14	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Magnesium	23000		6.0	3.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Manganese	320		0.60	0.087	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Nickel	35		0.60	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Potassium	3400		30	11	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Silver	2.2	B	0.30	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Sodium	370		60	8.9	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Thallium	0.96		0.60	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Vanadium	21		0.30	0.071	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Zinc	51		1.2	0.53	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:15	1
Boron	1.0		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:15	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:15	1
Manganese	1.5		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Nickel	0.028		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:15	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Zinc	0.080	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.025		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:55	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.019	0.0062	mg/Kg	☼	12/18/19 14:15	12/19/19 07:58	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Acetone	0.021		0.017	0.0076	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 16:55	1
4-Bromofluorobenzene (Surr)	97		75 - 131	12/11/19 19:47	12/19/19 16:55	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 16:55	1
Toluene-d8 (Surr)	95		75 - 124	12/11/19 19:47	12/19/19 16:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.090	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Naphthalene	0.052		0.040	0.0062	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Methylnaphthalene	0.10		0.082	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Acenaphthene	0.048		0.040	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Fluorene	0.037	J	0.040	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Phenanthrene	0.21		0.040	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Anthracene	0.021	J	0.040	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Pyrene	0.038	J	0.040	0.0081	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.040	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		31 - 166				12/18/19 16:01	12/21/19 18:34	1
Phenol-d5	94		30 - 153				12/18/19 16:01	12/21/19 18:34	1
Nitrobenzene-d5	82		37 - 147				12/18/19 16:01	12/21/19 18:34	1
2-Fluorobiphenyl	102		43 - 145				12/18/19 16:01	12/21/19 18:34	1
2,4,6-Tribromophenol	56		31 - 143				12/18/19 16:01	12/21/19 18:34	1
Terphenyl-d14	110		42 - 157				12/18/19 16:01	12/21/19 18:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Arsenic	7.2		0.58	0.20	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Barium	39		0.58	0.066	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Beryllium	0.71		0.23	0.054	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Boron	20	B	2.9	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Cadmium	0.26	B	0.12	0.021	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Calcium	59000		120	20	mg/Kg	☼	12/17/19 17:12	12/19/19 11:10	10
Chromium	17		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Copper	27		0.58	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Iron	20000		12	6.1	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Lead	14		0.29	0.13	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Magnesium	23000		5.8	2.9	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Manganese	380		0.58	0.085	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Nickel	34		0.58	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Potassium	3400		29	10	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Selenium	0.64		0.58	0.34	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Silver	2.3	B	0.29	0.075	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Sodium	200		58	8.6	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Vanadium	21		0.29	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Zinc	72		1.2	0.51	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:19	1
Boron	0.37	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:19	1
Manganese	1.7		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Nickel	0.028		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:19	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Zinc	0.032	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:19	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.053		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:59	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	B	0.019	0.0062	mg/Kg	☼	12/18/19 14:15	12/19/19 08:00	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Acetone	0.012	J	0.018	0.0076	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 17:21	1
4-Bromofluorobenzene (Surr)	99		75 - 131	12/11/19 19:47	12/19/19 17:21	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 17:21	1
Toluene-d8 (Surr)	100		75 - 124	12/11/19 19:47	12/19/19 17:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Methylnaphthalene	0.058	J	0.083	0.0076	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dinitrophenol	<0.83	*	0.83	0.73	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Acenaphthene	0.037	J	0.041	0.0074	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Fluorene	0.034	J	0.041	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Phenanthrene	0.11		0.041	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Pyrene	0.022	J	0.041	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.017	J	0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		31 - 166				12/18/19 16:01	12/21/19 19:04	1
Phenol-d5	89		30 - 153				12/18/19 16:01	12/21/19 19:04	1
Nitrobenzene-d5	80		37 - 147				12/18/19 16:01	12/21/19 19:04	1
2-Fluorobiphenyl	98		43 - 145				12/18/19 16:01	12/21/19 19:04	1
2,4,6-Tribromophenol	54		31 - 143				12/18/19 16:01	12/21/19 19:04	1
Terphenyl-d14	103		42 - 157				12/18/19 16:01	12/21/19 19:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Arsenic	6.6		0.61	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Barium	43		0.61	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Beryllium	0.72		0.24	0.057	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Boron	20	B	3.0	0.28	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Cadmium	0.18	B	0.12	0.022	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Calcium	55000		120	21	mg/Kg	☼	12/17/19 17:12	12/19/19 11:14	10
Chromium	18		0.61	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Copper	25		0.61	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Iron	19000		12	6.3	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Lead	13		0.30	0.14	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Magnesium	22000		6.1	3.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Manganese	310		0.61	0.088	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Nickel	34		0.61	0.18	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Potassium	3300		30	11	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Selenium	0.48	J	0.61	0.36	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Silver	2.3	B	0.30	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Sodium	210		61	9.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Thallium	1.1		0.61	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Vanadium	22		0.30	0.071	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Zinc	60		1.2	0.53	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:32	1
Boron	0.10	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:32	1
Manganese	1.7		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Nickel	0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:32	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.19		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:03	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:22	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.019	0.0062	mg/Kg	☼	12/18/19 14:15	12/19/19 08:02	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	12/11/19 19:47	12/19/19 17:46	1
4-Bromofluorobenzene (Surr)	106		75 - 131	12/11/19 19:47	12/19/19 17:46	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 17:46	1
Toluene-d8 (Surr)	103		75 - 124	12/11/19 19:47	12/19/19 17:46	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.084	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Nitrobenzene	<0.038	*	0.038	0.0094	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Methylnaphthalene	0.029	J	0.076	0.0069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Acenaphthene	0.051		0.038	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Dibenzofuran	0.059	J	0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Phenanthrene	0.30		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Pyrene	0.043		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzof[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[g,h,i]perylene	0.014	J	0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		31 - 166	12/18/19 16:01	12/21/19 19:33	1
Phenol-d5	89		30 - 153	12/18/19 16:01	12/21/19 19:33	1
Nitrobenzene-d5	81		37 - 147	12/18/19 16:01	12/21/19 19:33	1
2-Fluorobiphenyl	99		43 - 145	12/18/19 16:01	12/21/19 19:33	1
2,4,6-Tribromophenol	37		31 - 143	12/18/19 16:01	12/21/19 19:33	1
Terphenyl-d14	100		42 - 157	12/18/19 16:01	12/21/19 19:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Arsenic	11		0.53	0.18	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Barium	18		0.53	0.061	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Beryllium	0.48		0.21	0.050	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Boron	13	B	2.7	0.25	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Cadmium	0.26	B	0.11	0.019	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Calcium	53000		110	18	mg/Kg	☼	12/17/19 17:12	12/19/19 12:53	10
Chromium	11		0.53	0.26	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Cobalt	14		0.27	0.070	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Copper	38		0.53	0.15	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Iron	19000		11	5.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Lead	19		0.27	0.12	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Magnesium	25000		5.3	2.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Manganese	360		0.53	0.077	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Nickel	34		0.53	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Potassium	2000		27	9.5	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Selenium	0.75		0.53	0.31	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Silver	1.4	B	0.27	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Sodium	140		53	7.9	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Thallium	1.2		0.53	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Vanadium	14		0.27	0.063	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Zinc	55		1.1	0.47	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.30	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:37	1
Boron	0.073	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:37	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Cobalt	0.034		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:37	1
Manganese	1.8		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Nickel	0.065		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:37	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 10:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.018	0.0059	mg/Kg	☼	12/18/19 14:15	12/19/19 08:08	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 18:12	1
4-Bromofluorobenzene (Surr)	101		75 - 131	12/11/19 19:47	12/19/19 18:12	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 18:12	1
Toluene-d8 (Surr)	93		75 - 124	12/11/19 19:47	12/19/19 18:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.086	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Nitrobenzene	<0.038	*	0.038	0.0096	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Methylnaphthalene	0.025	J	0.078	0.0071	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Acenaphthene	0.039		0.038	0.0069	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Phenanthrene	0.17		0.038	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Pyrene	0.030	J	0.038	0.0077	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzof[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		31 - 166	12/18/19 16:01	12/21/19 20:03	1
Phenol-d5	99		30 - 153	12/18/19 16:01	12/21/19 20:03	1
Nitrobenzene-d5	89		37 - 147	12/18/19 16:01	12/21/19 20:03	1
2-Fluorobiphenyl	105		43 - 145	12/18/19 16:01	12/21/19 20:03	1
2,4,6-Tribromophenol	55		31 - 143	12/18/19 16:01	12/21/19 20:03	1
Terphenyl-d14	111		42 - 157	12/18/19 16:01	12/21/19 20:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Arsenic	10		0.58	0.20	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Barium	30		0.58	0.067	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Beryllium	0.61		0.23	0.054	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Boron	17 B		2.9	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Cadmium	0.24 B		0.12	0.021	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Calcium	55000		120	20	mg/Kg	☼	12/17/19 17:12	12/19/19 13:01	10
Chromium	14		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Cobalt	15		0.29	0.076	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Copper	33		0.58	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Iron	20000		12	6.1	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Lead	16		0.29	0.13	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Magnesium	25000		5.8	2.9	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Manganese	350		0.58	0.085	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Nickel	37		0.58	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Potassium	2700		29	10	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Selenium	0.74		0.58	0.34	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Silver	1.8 B		0.29	0.075	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Sodium	180		58	8.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Thallium	1.3		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Vanadium	18		0.29	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Zinc	58		1.2	0.51	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:41	1
Boron	1.0		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:41	1
Manganese	1.7		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Nickel	0.049		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:41	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Zinc	0.076	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.044		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:11	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00046		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 10:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0063	mg/Kg	☼	12/18/19 14:15	12/19/19 08:10	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1,2,2-Tetrachloroethane	<0.0017	*	0.0017	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	12/11/19 19:47	12/19/19 18:37	1
4-Bromofluorobenzene (Surr)	149	X *	75 - 131	12/11/19 19:47	12/19/19 18:37	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 18:37	1
Toluene-d8 (Surr)	116		75 - 124	12/11/19 19:47	12/19/19 18:37	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.084	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Nitrobenzene	<0.038	*	0.038	0.0094	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Acenaphthene	0.044		0.038	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Phenanthrene	0.26		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Pyrene	0.036	J	0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzof[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.038		0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[g,h,i]perylene	0.015	J	0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		31 - 166				12/18/19 16:01	12/21/19 20:32	1
Phenol-d5	102		30 - 153				12/18/19 16:01	12/21/19 20:32	1
Nitrobenzene-d5	89		37 - 147				12/18/19 16:01	12/21/19 20:32	1
2-Fluorobiphenyl	107		43 - 145				12/18/19 16:01	12/21/19 20:32	1
2,4,6-Tribromophenol	49		31 - 143				12/18/19 16:01	12/21/19 20:32	1
Terphenyl-d14	109		42 - 157				12/18/19 16:01	12/21/19 20:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.1	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Arsenic	13		0.54	0.18	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Barium	12		0.54	0.061	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Beryllium	0.33		0.21	0.050	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Boron	9.5	B	2.7	0.25	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Cadmium	0.34	B	0.11	0.019	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Calcium	72000		110	18	mg/Kg	☼	12/17/19 17:12	12/19/19 13:05	10
Chromium	7.2		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Cobalt	11		0.27	0.070	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Copper	37		0.54	0.15	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Iron	17000		11	5.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Lead	18		0.27	0.12	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Magnesium	39000		54	27	mg/Kg	☼	12/17/19 17:12	12/19/19 13:05	10
Manganese	450		0.54	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Nickel	26		0.54	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Potassium	1300		27	9.5	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Selenium	0.88		0.54	0.31	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Silver	1.3	B	0.27	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Sodium	140		54	7.9	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Thallium	1.0		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Vanadium	11		0.27	0.063	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Zinc	63		1.1	0.47	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:46	1
Boron	0.81	F1	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:46	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Cobalt	0.041		0.025	0.010	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Iron	<0.40		0.40	0.20	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Manganese	2.0		0.025	0.010	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Nickel	0.076		0.025	0.010	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Silver	<0.025		0.025	0.010	mg/L	-	12/24/19 06:24	12/24/19 17:46	1
Zinc	0.076	J	0.50	0.020	mg/L	-	12/24/19 06:24	12/24/19 17:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.012	J	0.025	0.010	mg/L	-	12/24/19 15:32	12/26/19 09:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/24/19 06:24	12/26/19 13:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/24/19 06:24	12/26/19 13:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/24/19 09:15	12/26/19 10:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.018	0.0059	mg/Kg	☼	12/18/19 14:15	12/19/19 08:17	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

GC/MS VOA

Prep Batch: 520652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	5035	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	5035	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	5035	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	5035	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	5035	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	5035	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	5035	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	5035	

Analysis Batch: 521439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	8260B	520652
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	8260B	520652
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	8260B	520652
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	8260B	520652
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	8260B	520652
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	8260B	520652
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	8260B	520652
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	8260B	520652
MB 500-521439/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-521439/26	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-521439/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 521351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	3541	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	3541	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	3541	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	3541	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	3541	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	3541	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	3541	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	3541	
MB 500-521351/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-521351/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 521902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	8270D	521351
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	8270D	521351
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	8270D	521351
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	8270D	521351
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	8270D	521351
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	8270D	521351
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	8270D	521351

Analysis Batch: 522137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521351/1-A	Method Blank	Total/NA	Solid	8270D	521351

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

GC/MS Semi VOA (Continued)

Analysis Batch: 522137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-521351/2-A	Lab Control Sample	Total/NA	Solid	8270D	521351

Analysis Batch: 522273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	8270D	521351

Metals

Prep Batch: 521131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	3050B	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	3050B	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	3050B	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	3050B	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	3050B	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	3050B	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	3050B	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	3050B	
MB 500-521131/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-521131/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 521249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	7471B	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	7471B	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	7471B	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	7471B	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	7471B	
MB 500-521249/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521249/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 521259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	7471B	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	7471B	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	7471B	
MB 500-521259/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521259/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 521401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	6010B	521131
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	6010B	521131
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	6010B	521131
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	6010B	521131
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	6010B	521131
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	6010B	521131
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	6010B	521131
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	6010B	521131
MB 500-521131/1-A	Method Blank	Total/NA	Solid	6010B	521131
LCS 500-521131/2-A	Lab Control Sample	Total/NA	Solid	6010B	521131

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals

Analysis Batch: 521492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	7471B	521249
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	7471B	521249
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	7471B	521249
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	7471B	521249
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	7471B	521249
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	7471B	521259
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	7471B	521259
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	7471B	521259
MB 500-521249/12-A	Method Blank	Total/NA	Solid	7471B	521249
MB 500-521259/12-A	Method Blank	Total/NA	Solid	7471B	521259
LCS 500-521249/13-A	Lab Control Sample	Total/NA	Solid	7471B	521249
LCS 500-521259/13-A	Lab Control Sample	Total/NA	Solid	7471B	521259

Leach Batch: 521522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	1311	
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	1311	
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	1311	
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	1311	
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	1311	
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	1311	
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	1311	
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	1311	
LB 500-521522/1-B	Method Blank	TCLP	Solid	1311	
LB 500-521522/1-C	Method Blank	TCLP	Solid	1311	
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	1311	
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	1311	

Analysis Batch: 521527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	6010B	521131
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	6010B	521131
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	6010B	521131
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	6010B	521131
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	6010B	521131
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	6010B	521131
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	6010B	521131
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	6010B	521131

Leach Batch: 522173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	SPLP East	Solid	1312	
500-174843-2	2615V2-262-B01 (5-10)	SPLP East	Solid	1312	
500-174843-3	2615V2-262-B01 (10-15)	SPLP East	Solid	1312	
500-174843-4	2615V2-262-B01 (15-23)	SPLP East	Solid	1312	
500-174843-5	2615V2-262-B01 (23-31)	SPLP East	Solid	1312	
500-174843-6	2615V2-262-B01 (31-39)	SPLP East	Solid	1312	
500-174843-7	2615V2-262-B01 (31-39)D	SPLP East	Solid	1312	
500-174843-8	2615V2-262-B01 (39-47)	SPLP East	Solid	1312	
LB 500-522173/1-B	Method Blank	SPLP East	Solid	1312	
500-174843-8 MS	2615V2-262-B01 (39-47)	SPLP East	Solid	1312	

Eurolins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals (Continued)

Leach Batch: 522173 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-8 DU	2615V2-262-B01 (39-47)	SPLP East	Solid	1312	

Prep Batch: 522245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	3010A	521522
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	3010A	521522
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	3010A	521522
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	3010A	521522
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	3010A	521522
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	3010A	521522
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	3010A	521522
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	3010A	521522
LB 500-521522/1-B	Method Blank	TCLP	Solid	3010A	521522
LCS 500-522245/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	3010A	521522
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	3010A	521522

Prep Batch: 522310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	7470A	521522
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	7470A	521522
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	7470A	521522
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	7470A	521522
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	7470A	521522
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	7470A	521522
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	7470A	521522
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	7470A	521522
LB 500-521522/1-C	Method Blank	TCLP	Solid	7470A	521522
MB 500-522310/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-522310/15-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 522365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	SPLP East	Solid	3010A	522173
500-174843-2	2615V2-262-B01 (5-10)	SPLP East	Solid	3010A	522173
500-174843-3	2615V2-262-B01 (10-15)	SPLP East	Solid	3010A	522173
500-174843-4	2615V2-262-B01 (15-23)	SPLP East	Solid	3010A	522173
500-174843-5	2615V2-262-B01 (23-31)	SPLP East	Solid	3010A	522173
500-174843-6	2615V2-262-B01 (31-39)	SPLP East	Solid	3010A	522173
500-174843-7	2615V2-262-B01 (31-39)D	SPLP East	Solid	3010A	522173
500-174843-8	2615V2-262-B01 (39-47)	SPLP East	Solid	3010A	522173
LB 500-522173/1-B	Method Blank	SPLP East	Solid	3010A	522173
LCS 500-522365/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174843-8 MS	2615V2-262-B01 (39-47)	SPLP East	Solid	3010A	522173
500-174843-8 DU	2615V2-262-B01 (39-47)	SPLP East	Solid	3010A	522173

Analysis Batch: 522413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	6010B	522245
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	6010B	522245
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	6010B	522245

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals (Continued)

Analysis Batch: 522413 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	6010B	522245
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	6010B	522245
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	6010B	522245
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	6010B	522245
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	6010B	522245
LB 500-521522/1-B	Method Blank	TCLP	Solid	6010B	522245
LCS 500-522245/2-A	Lab Control Sample	Total/NA	Solid	6010B	522245
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	6010B	522245
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	6010B	522245

Analysis Batch: 522524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	7470A	522310
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	7470A	522310
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	7470A	522310
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	7470A	522310
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	7470A	522310
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	7470A	522310
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	7470A	522310
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	7470A	522310
LB 500-521522/1-C	Method Blank	TCLP	Solid	7470A	522310
MB 500-522310/12-A	Method Blank	Total/NA	Solid	7470A	522310
LCS 500-522310/15-A	Lab Control Sample	Total/NA	Solid	7470A	522310

Analysis Batch: 522543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	SPLP East	Solid	6010B	522365
500-174843-2	2615V2-262-B01 (5-10)	SPLP East	Solid	6010B	522365
500-174843-3	2615V2-262-B01 (10-15)	SPLP East	Solid	6010B	522365
500-174843-4	2615V2-262-B01 (15-23)	SPLP East	Solid	6010B	522365
500-174843-5	2615V2-262-B01 (23-31)	SPLP East	Solid	6010B	522365
500-174843-6	2615V2-262-B01 (31-39)	SPLP East	Solid	6010B	522365
500-174843-7	2615V2-262-B01 (31-39)D	SPLP East	Solid	6010B	522365
500-174843-8	2615V2-262-B01 (39-47)	SPLP East	Solid	6010B	522365
LB 500-522173/1-B	Method Blank	SPLP East	Solid	6010B	522365
LCS 500-522365/2-A	Lab Control Sample	Total/NA	Solid	6010B	522365
500-174843-8 MS	2615V2-262-B01 (39-47)	SPLP East	Solid	6010B	522365
500-174843-8 DU	2615V2-262-B01 (39-47)	SPLP East	Solid	6010B	522365

Analysis Batch: 522587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	6020A	522245
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	6020A	522245
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	6020A	522245
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	6020A	522245
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	6020A	522245
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	6020A	522245
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	6020A	522245
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	6020A	522245
LB 500-521522/1-B	Method Blank	TCLP	Solid	6020A	522245
LCS 500-522245/2-A	Lab Control Sample	Total/NA	Solid	6020A	522245

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals (Continued)

Analysis Batch: 522587 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	6020A	522245
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	6020A	522245

General Chemistry

Analysis Batch: 521013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	Moisture	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	Moisture	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	Moisture	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	Moisture	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	Moisture	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	Moisture	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	Moisture	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	Moisture	
500-174843-8 DU	2615V2-262-B01 (39-47)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174843-1	2615V2-262-B01 (0-5)	94	108	86	95
500-174843-2	2615V2-262-B01 (5-10)	90	112	86	95
500-174843-3	2615V2-262-B01 (10-15)	91	101	85	102
500-174843-4	2615V2-262-B01 (15-23)	91	97	86	95
500-174843-5	2615V2-262-B01 (23-31)	91	99	85	100
500-174843-6	2615V2-262-B01 (31-39)	89	106	85	103
500-174843-7	2615V2-262-B01 (31-39)D	91	101	85	93
500-174843-8	2615V2-262-B01 (39-47)	90	149 X *	86	116
LCS 500-521439/26	Lab Control Sample	85	94	83	94
LCSD 500-521439/7	Lab Control Sample Dup	85	94	83	95
MB 500-521439/6	Method Blank	85	99	81	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174843-1	2615V2-262-B01 (0-5)	129	111	89	97	60	147
500-174843-2	2615V2-262-B01 (5-10)	102	93	79	103	47	115
500-174843-3	2615V2-262-B01 (10-15)	102	95	78	100	48	116
500-174843-4	2615V2-262-B01 (15-23)	103	94	82	102	56	110
500-174843-5	2615V2-262-B01 (23-31)	103	89	80	98	54	103
500-174843-6	2615V2-262-B01 (31-39)	96	89	81	99	37	100
500-174843-7	2615V2-262-B01 (31-39)D	112	99	89	105	55	111
500-174843-8	2615V2-262-B01 (39-47)	108	102	89	107	49	109
LCS 500-521351/2-A	Lab Control Sample	134	116	96	98	76	98
MB 500-521351/1-A	Method Blank	164	134	106	107	64	135

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521439/6
Matrix: Solid
Analysis Batch: 521439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/19/19 10:57	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/19/19 10:57	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/19/19 10:57	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 10:57	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 10:57	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/19/19 10:57	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/19/19 10:57	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/19/19 10:57	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/19/19 10:57	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/19/19 10:57	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/19/19 10:57	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/19/19 10:57	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/19/19 10:57	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/19/19 10:57	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/19/19 10:57	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/19/19 10:57	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/19/19 10:57	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/19/19 10:57	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/19/19 10:57	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/19/19 10:57	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 10:57	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/19/19 10:57	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/19/19 10:57	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/19/19 10:57	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/19/19 10:57	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/19/19 10:57	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/19/19 10:57	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/19/19 10:57	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/19/19 10:57	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/19/19 10:57	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/19/19 10:57	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/19/19 10:57	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/19/19 10:57	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/19/19 10:57	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/19/19 10:57	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/19/19 10:57	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/19/19 10:57	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	85		70 - 134		12/19/19 10:57	1
4-Bromofluorobenzene (Surr)	99		75 - 131		12/19/19 10:57	1
Dibromofluoromethane	81		75 - 126		12/19/19 10:57	1
Toluene-d8 (Surr)	92		75 - 124		12/19/19 10:57	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521439/26

Matrix: Solid

Analysis Batch: 521439

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0401		mg/Kg		80	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0438		mg/Kg		88	70 - 122
1,1,2-Trichloroethane	0.0500	0.0449		mg/Kg		90	70 - 125
1,1-Dichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125
1,1-Dichloroethene	0.0500	0.0441		mg/Kg		88	70 - 120
1,2-Dichloroethane	0.0500	0.0434		mg/Kg		87	70 - 130
1,2-Dichloropropane	0.0500	0.0480		mg/Kg		96	70 - 125
2-Butanone (MEK)	0.0500	0.0417		mg/Kg		83	47 - 138
2-Hexanone	0.0500	0.0409		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0387		mg/Kg		77	50 - 148
Acetone	0.0500	0.0473		mg/Kg		95	40 - 150
Benzene	0.0500	0.0442		mg/Kg		88	70 - 125
Bromodichloromethane	0.0500	0.0401		mg/Kg		80	67 - 129
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136
Bromomethane	0.0500	0.0358		mg/Kg		72	70 - 130
Carbon disulfide	0.0500	0.0421		mg/Kg		84	70 - 129
Carbon tetrachloride	0.0500	0.0391		mg/Kg		78	75 - 125
Chlorobenzene	0.0500	0.0446		mg/Kg		89	50 - 150
Chloroethane	0.0500	0.0352	*	mg/Kg		70	75 - 125
Chloroform	0.0500	0.0397		mg/Kg		79	57 - 135
Chloromethane	0.0500	0.0426		mg/Kg		85	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0417		mg/Kg		83	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0420		mg/Kg		84	70 - 125
Dibromochloromethane	0.0500	0.0397		mg/Kg		79	69 - 125
Ethylbenzene	0.0500	0.0446		mg/Kg		89	61 - 136
Methyl tert-butyl ether	0.0500	0.0416		mg/Kg		83	50 - 140
Methylene Chloride	0.0500	0.0418		mg/Kg		84	70 - 126
Styrene	0.0500	0.0434		mg/Kg		87	70 - 125
Tetrachloroethene	0.0500	0.0454		mg/Kg		91	70 - 124
Toluene	0.0500	0.0450		mg/Kg		90	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0419		mg/Kg		84	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0416		mg/Kg		83	70 - 125
Trichloroethene	0.0500	0.0439		mg/Kg		88	70 - 125
Vinyl acetate	0.0500	0.0324		mg/Kg		65	40 - 153
Vinyl chloride	0.0500	0.0383		mg/Kg		77	70 - 125
Xylenes, Total	0.100	0.0873		mg/Kg		87	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	83		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-521439/7

Matrix: Solid

Analysis Batch: 521439

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0402		mg/Kg		80	70 - 128	0	30
1,1,2,2-Tetrachloroethane	0.0500	0.0426		mg/Kg		85	70 - 122	3	30
1,1,2-Trichloroethane	0.0500	0.0445		mg/Kg		89	70 - 125	1	30
1,1-Dichloroethane	0.0500	0.0444		mg/Kg		89	70 - 125	1	30
1,1-Dichloroethene	0.0500	0.0442		mg/Kg		88	70 - 120	0	30
1,2-Dichloroethane	0.0500	0.0427		mg/Kg		85	70 - 130	2	30
1,2-Dichloropropane	0.0500	0.0473		mg/Kg		95	70 - 125	1	30
2-Butanone (MEK)	0.0500	0.0437		mg/Kg		87	47 - 138	5	30
2-Hexanone	0.0500	0.0433		mg/Kg		87	48 - 146	6	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0419		mg/Kg		84	50 - 148	8	30
Acetone	0.0500	0.0494		mg/Kg		99	40 - 150	4	30
Benzene	0.0500	0.0435		mg/Kg		87	70 - 125	2	30
Bromodichloromethane	0.0500	0.0391		mg/Kg		78	67 - 129	3	30
Bromoform	0.0500	0.0363		mg/Kg		73	68 - 136	1	30
Bromomethane	0.0500	0.0361		mg/Kg		72	70 - 130	1	30
Carbon disulfide	0.0500	0.0430		mg/Kg		86	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0393		mg/Kg		79	75 - 125	0	30
Chlorobenzene	0.0500	0.0447		mg/Kg		89	50 - 150	0	30
Chloroethane	0.0500	0.0331	*	mg/Kg		66	75 - 125	6	30
Chloroform	0.0500	0.0394		mg/Kg		79	57 - 135	1	30
Chloromethane	0.0500	0.0437		mg/Kg		87	70 - 125	3	30
cis-1,2-Dichloroethene	0.0500	0.0415		mg/Kg		83	70 - 125	1	30
cis-1,3-Dichloropropene	0.0500	0.0425		mg/Kg		85	70 - 125	1	30
Dibromochloromethane	0.0500	0.0394		mg/Kg		79	69 - 125	1	30
Ethylbenzene	0.0500	0.0446		mg/Kg		89	61 - 136	0	30
Methyl tert-butyl ether	0.0500	0.0405		mg/Kg		81	50 - 140	3	30
Methylene Chloride	0.0500	0.0416		mg/Kg		83	70 - 126	1	30
Styrene	0.0500	0.0435		mg/Kg		87	70 - 125	0	30
Tetrachloroethene	0.0500	0.0449		mg/Kg		90	70 - 124	1	30
Toluene	0.0500	0.0452		mg/Kg		90	70 - 125	0	30
trans-1,2-Dichloroethene	0.0500	0.0420		mg/Kg		84	70 - 125	0	30
trans-1,3-Dichloropropene	0.0500	0.0416		mg/Kg		83	70 - 125	0	30
Trichloroethene	0.0500	0.0441		mg/Kg		88	70 - 125	0	30
Vinyl acetate	0.0500	0.0334		mg/Kg		67	40 - 153	3	30
Vinyl chloride	0.0500	0.0413		mg/Kg		83	70 - 125	8	30
Xylenes, Total	0.100	0.0877		mg/Kg		88	53 - 147	0	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	83		75 - 126
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521351/1-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521351

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/18/19 16:01	12/23/19 19:17	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521351/1-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521351

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/18/19 16:01	12/23/19 19:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	164		31 - 166	12/18/19 16:01	12/23/19 19:17	1
Phenol-d5	134		30 - 153	12/18/19 16:01	12/23/19 19:17	1
Nitrobenzene-d5	106		37 - 147	12/18/19 16:01	12/23/19 19:17	1
2-Fluorobiphenyl	107		43 - 145	12/18/19 16:01	12/23/19 19:17	1
2,4,6-Tribromophenol	64		31 - 143	12/18/19 16:01	12/23/19 19:17	1
Terphenyl-d14	135		42 - 157	12/18/19 16:01	12/23/19 19:17	1

Lab Sample ID: LCS 500-521351/2-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521351

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Phenol	1.33	1.66	*	mg/Kg		125	56 - 122
Bis(2-chloroethyl)ether	1.33	1.35		mg/Kg		101	55 - 111
1,3-Dichlorobenzene	1.33	1.15		mg/Kg		86	65 - 124
1,4-Dichlorobenzene	1.33	1.18		mg/Kg		88	61 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		90	62 - 110
2-Methylphenol	1.33	1.55		mg/Kg		116	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.19		mg/Kg		89	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.55		mg/Kg		117	56 - 118
Hexachloroethane	1.33	1.10		mg/Kg		83	60 - 114
2-Chlorophenol	1.33	1.29		mg/Kg		97	64 - 110
Nitrobenzene	1.33	1.56	*	mg/Kg		117	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.43		mg/Kg		108	60 - 112
1,2,4-Trichlorobenzene	1.33	1.32		mg/Kg		99	66 - 117
Isophorone	1.33	1.42		mg/Kg		106	55 - 110
2,4-Dimethylphenol	1.33	1.15		mg/Kg		86	60 - 110
Hexachlorobutadiene	1.33	1.33		mg/Kg		100	56 - 120
Naphthalene	1.33	1.28		mg/Kg		96	63 - 110
2,4-Dichlorophenol	1.33	1.23		mg/Kg		92	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521351/2-A

Matrix: Solid

Analysis Batch: 522137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 521351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	0.730		mg/Kg		55	30 - 150
2,4,6-Trichlorophenol	1.33	1.10		mg/Kg		83	57 - 120
2,4,5-Trichlorophenol	1.33	0.968		mg/Kg		73	50 - 120
Hexachlorocyclopentadiene	1.33	0.822		mg/Kg		62	10 - 133
2-Methylnaphthalene	1.33	1.32		mg/Kg		99	69 - 112
2-Nitroaniline	1.33	1.36		mg/Kg		102	57 - 124
2-Chloronaphthalene	1.33	1.28		mg/Kg		96	69 - 114
4-Chloro-3-methylphenol	1.33	1.06		mg/Kg		79	65 - 122
2,6-Dinitrotoluene	1.33	1.26		mg/Kg		95	70 - 123
2-Nitrophenol	1.33	1.24		mg/Kg		93	60 - 120
3-Nitroaniline	1.33	0.775		mg/Kg		58	40 - 122
Dimethyl phthalate	1.33	1.23		mg/Kg		92	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		8	10 - 100
Acenaphthylene	1.33	1.30		mg/Kg		97	68 - 120
2,4-Dinitrotoluene	1.33	1.31		mg/Kg		98	69 - 124
Acenaphthene	1.33	1.30		mg/Kg		97	65 - 124
Dibenzofuran	1.33	1.33		mg/Kg		100	66 - 115
4-Nitrophenol	2.67	1.29		mg/Kg		48	30 - 122
Fluorene	1.33	1.32		mg/Kg		99	62 - 120
4-Nitroaniline	1.33	1.08		mg/Kg		81	60 - 160
4-Bromophenyl phenyl ether	1.33	1.32		mg/Kg		99	68 - 118
Hexachlorobenzene	1.33	1.37		mg/Kg		103	63 - 124
Diethyl phthalate	1.33	1.37		mg/Kg		103	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.28		mg/Kg		96	62 - 119
Pentachlorophenol	2.67	<0.67		mg/Kg		19	13 - 112
N-Nitrosodiphenylamine	1.33	1.35		mg/Kg		101	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.660	J	mg/Kg		25	10 - 110
Phenanthrene	1.33	1.36		mg/Kg		102	62 - 120
Anthracene	1.33	1.37		mg/Kg		103	70 - 114
Carbazole	1.33	1.46		mg/Kg		109	65 - 142
Di-n-butyl phthalate	1.33	1.27		mg/Kg		95	65 - 120
Fluoranthene	1.33	1.38		mg/Kg		103	62 - 120
Pyrene	1.33	1.25		mg/Kg		94	61 - 128
Butyl benzyl phthalate	1.33	1.14		mg/Kg		85	71 - 129
Benzo[a]anthracene	1.33	1.33		mg/Kg		100	67 - 122
Chrysene	1.33	1.24		mg/Kg		93	63 - 120
3,3'-Dichlorobenzidine	1.33	0.959		mg/Kg		72	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.19		mg/Kg		89	72 - 131
Di-n-octyl phthalate	1.33	1.24		mg/Kg		93	68 - 134
Benzo[b]fluoranthene	1.33	1.36		mg/Kg		102	69 - 129
Benzo[k]fluoranthene	1.33	1.42		mg/Kg		107	68 - 127
Benzo[a]pyrene	1.33	1.36		mg/Kg		102	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.56		mg/Kg		117	68 - 130
Dibenz(a,h)anthracene	1.33	1.63		mg/Kg		122	64 - 131
Benzo[g,h,i]perylene	1.33	1.62		mg/Kg		121	72 - 131
3 & 4 Methylphenol	1.33	1.23		mg/Kg		93	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521351/2-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521351

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	134		31 - 166
Phenol-d5	116		30 - 153
Nitrobenzene-d5	96		37 - 147
2-Fluorobiphenyl	98		43 - 145
2,4,6-Tribromophenol	76		31 - 143
Terphenyl-d14	98		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-521131/1-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521131

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Barium	<1.0		1.0	0.11	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Boron	0.519	J	5.0	0.47	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Cadmium	0.0692	J	0.20	0.036	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Calcium	<20		20	3.4	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Copper	<1.0		1.0	0.28	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Iron	<20		20	10	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Lead	<0.50		0.50	0.23	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Magnesium	<10		10	5.0	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Potassium	<50		50	18	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Silver	0.130	J	0.50	0.13	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Sodium	<100		100	15	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/17/19 17:12	12/18/19 16:02	1

Lab Sample ID: LCS 500-521131/2-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521131

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	50.0	48.9		mg/Kg		98	80 - 120
Arsenic	10.0	9.33		mg/Kg		93	80 - 120
Barium	200	191		mg/Kg		95	80 - 120
Beryllium	5.00	4.63		mg/Kg		93	80 - 120
Boron	100	86.9		mg/Kg		87	80 - 120
Cadmium	5.00	4.74		mg/Kg		95	80 - 120
Calcium	1000	928		mg/Kg		93	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-521131/2-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521131

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	20.0	19.5		mg/Kg		97	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Copper	25.0	23.9		mg/Kg		96	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Lead	10.0	9.37		mg/Kg		94	80 - 120
Magnesium	1000	894		mg/Kg		89	80 - 120
Manganese	50.0	46.9		mg/Kg		94	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Potassium	1000	944		mg/Kg		94	80 - 120
Selenium	10.0	8.84		mg/Kg		88	80 - 120
Silver	5.00	4.62		mg/Kg		92	80 - 120
Sodium	1000	980		mg/Kg		98	80 - 120
Thallium	10.0	9.13		mg/Kg		91	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	47.5		mg/Kg		95	80 - 120

Lab Sample ID: LCS 500-522245/2-A
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.430	J	mg/L		86	80 - 120
Beryllium	0.0500	0.0428		mg/L		86	80 - 120
Boron	1.00	0.844		mg/L		84	80 - 120
Cadmium	0.0500	0.0464		mg/L		93	80 - 120
Chromium	0.200	0.165		mg/L		83	80 - 120
Cobalt	0.500	0.447		mg/L		89	80 - 120
Iron	1.00	0.929		mg/L		93	80 - 120
Lead	0.100	0.0859		mg/L		86	80 - 120
Manganese	0.500	0.422		mg/L		84	80 - 120
Nickel	0.500	0.440		mg/L		88	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120
Silver	0.0500	0.0458		mg/L		92	80 - 120
Zinc	0.500	0.468	J	mg/L		94	80 - 120

Lab Sample ID: LCS 500-522365/2-A
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.0960		mg/L		96	80 - 120
Manganese	0.500	0.472		mg/L		94	80 - 120

Lab Sample ID: LB 500-521522/1-B
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522245

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 16:57	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-521522/1-B
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522245

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 16:57	1
Boron	<0.50		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 16:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 16:57	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 16:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 16:57	1
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Nickel	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 16:57	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 16:57	1

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Barium	0.24	J	0.500	0.704		mg/L		93	75 - 125
Beryllium	<0.0040		0.0500	0.0474		mg/L		95	75 - 125
Boron	0.81	F1	1.00	1.50	F1	mg/L		69	75 - 125
Cadmium	<0.0050		0.0500	0.0466		mg/L		93	75 - 125
Chromium	<0.025		0.200	0.176		mg/L		88	75 - 125
Cobalt	0.041		0.500	0.490		mg/L		90	75 - 125
Iron	<0.40		1.00	0.950		mg/L		95	75 - 125
Lead	<0.0075		0.100	0.0839		mg/L		84	75 - 125
Manganese	2.0		0.500	2.62	4	mg/L		123	75 - 125
Nickel	0.076		0.500	0.519		mg/L		89	75 - 125
Selenium	<0.050		0.100	0.0932		mg/L		93	75 - 125
Silver	<0.025		0.0500	0.0505		mg/L		101	75 - 125
Zinc	0.076	J	0.500	0.510		mg/L		87	75 - 125

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Barium	0.24	J	0.233	J	mg/L		2	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.81	F1	0.811		mg/L		0.1	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.041		0.0400		mg/L		2	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	2.0		1.96		mg/L		2	20
Nickel	0.076		0.0756		mg/L		0.9	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Zinc	0.076	J	0.0765	J	mg/L		0.2	20

Lab Sample ID: LB 500-522173/1-B
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 522365

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 15:32	12/26/19 08:39	1
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:39	1

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: SPLP East
Prep Batch: 522365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	<0.0075		0.100	0.101		mg/L		101	75 - 125
Manganese	0.012	J	0.500	0.510		mg/L		99	75 - 125

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: SPLP East
Prep Batch: 522365

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.012	J	0.0126	J	mg/L		4	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-522245/2-A
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.522		mg/L		104	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LB 500-521522/1-B
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522245

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:08	1

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.514		mg/L		103	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	<0.0020		0.100	0.106		mg/L		106	75 - 125

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-522310/12-A
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:28	1

Lab Sample ID: LCS 500-522310/15-A
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00204		mg/L		102	80 - 120

Lab Sample ID: LB 500-521522/1-C
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522310

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:31	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-521249/12-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00592	J	0.017	0.0056	mg/Kg		12/18/19 14:15	12/19/19 07:03	1

Lab Sample ID: LCS 500-521249/13-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.177		mg/Kg		106	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: MB 500-521259/12-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/18/19 14:15	12/19/19 08:04	1

Lab Sample ID: LCS 500-521259/13-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521259
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.166		mg/Kg		100	80 - 120



Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:47	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:06	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:13	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:35	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 15:39	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 11:07	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:42	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 10:58	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 07:54	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:51	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:10	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:15	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:37	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 16:04	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 21:01	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:46	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:02	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 07:56	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:55	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:15	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:18	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:39	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 16:30	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 21:31	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:50	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:06	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 07:58	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:59	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:19	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:20	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:41	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 16:55	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 18:34	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:54	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:10	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:00	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:03	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:32	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:22	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:59	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 17:21	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 19:04	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:58	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:14	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:02	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:07	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:37	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:24	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 10:01	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 17:46	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 19:33	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 17:02	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 12:53	EEN	TAL CHI
Total/NA	Prep	7471B			521259	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:08	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:11	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:41	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:27	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 10:02	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 18:12	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 20:03	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 17:06	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 13:01	EEN	TAL CHI
Total/NA	Prep	7471B			521259	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:10	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:15	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:46	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:29	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 10:04	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 18:37	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 20:32	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 17:10	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 13:05	EEN	TAL CHI
Total/NA	Prep	7471B			521259	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:17	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENT/

2417 Bond Street, University Park, IL
 Phone: 708.534.5200 Fax: 708.5



500-174843 COC

Report To (optional)
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-174843

Chain of Custody Number: _____

Page 1 of 1

Temperature °C of Cooler: 5.4

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
<u>EDI</u>		<u>0945-028</u>								
Project Name		Lab Project #								
<u>IDOT 176-001 WO 47E</u>										
Project Location/State		Lab Project #								Comments
<u>Chicago, IL</u>										
Sampler		Lab PM								
<u>Mike Fischer</u>		<u>Richard Wright</u>								
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TELP METALS
			Date	Time						
<u>1</u>		<u>2615V2-262-001(0-5)</u>	<u>12-10-19</u>	<u>1315</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>2</u>		<u>(5-10)</u>		<u>1325</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>3</u>		<u>(10-15)</u>		<u>1330</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>4</u>		<u>(15-23)</u>		<u>1340</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>5</u>		<u>(23-31)</u>		<u>1350</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>6</u>		<u>(31-39)</u>		<u>1400</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>7</u>		<u>(31-39)D</u>		<u>1400</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>8</u>		<u>(39-47)</u>		<u>1415</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company <u>EDI</u>	Date <u>12/10/19</u>	Time <u>1430</u>	Received By <u>[Signature]</u>	Company <u>EA</u>	Date <u>12/10/19</u>	Time <u>1430</u>
Relinquished By <u>P. Neal</u>	Company <u>EA</u>	Date <u>12/10/19</u>	Time <u>1525</u>	Received By <u>[Signature]</u>	Company <u>EA</u>	Date <u>12/10/19</u>	Time <u>1525</u>

Lab Courier: EA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174843-1

Login Number: 174843

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174927-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/30/2019 2:24:57 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Job ID: 500-174927-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174927-1

Receipt

The samples were received on 12/11/2019 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 7.1° C and 9.1° C.

GC/MS VOA

Method 8260B: The laboratory control sample (LCS) for 521750 recovered outside control limits for the following analytes: Bromomethane and Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-174927-E-2-C MS) and (500-174927-E-2-D MSD)

Method 8270D: The following sample contained one base surrogate outside acceptance limits: 2615V2-01-B28 (31-39) (500-174927-13). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The following sample was diluted due to the abundance of non-target analytes: 2615V2-01-B31 (23-31) (500-174927-5). Elevated reporting limits (RLs) are provided.

Method 6010B: The laboratory control sample (LCS) for preparation batch 500-522374 and 500-522552 and analytical batch 500-522718 recovered outside control limits for the following analytes: zinc. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	0.012	J	0.017	0.0075	mg/Kg	1	*	*	8260B	Total/NA
Naphthalene	0.10		0.038	0.0058	mg/Kg	1	*	*	8270D	Total/NA
2-Methylnaphthalene	0.096		0.076	0.0070	mg/Kg	1	*	*	8270D	Total/NA
Acenaphthylene	0.065		0.038	0.0050	mg/Kg	1	*	*	8270D	Total/NA
Acenaphthene	0.15		0.038	0.0068	mg/Kg	1	*	*	8270D	Total/NA
Dibenzofuran	0.15	J	0.19	0.044	mg/Kg	1	*	*	8270D	Total/NA
Fluorene	0.19		0.038	0.0053	mg/Kg	1	*	*	8270D	Total/NA
Phenanthrene	1.9		0.038	0.0053	mg/Kg	1	*	*	8270D	Total/NA
Anthracene	0.48		0.038	0.0063	mg/Kg	1	*	*	8270D	Total/NA
Carbazole	0.22		0.19	0.094	mg/Kg	1	*	*	8270D	Total/NA
Fluoranthene	2.4		0.038	0.0070	mg/Kg	1	*	*	8270D	Total/NA
Pyrene	2.2		0.038	0.0075	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]anthracene	1.1		0.038	0.0051	mg/Kg	1	*	*	8270D	Total/NA
Chrysene	1.1		0.038	0.010	mg/Kg	1	*	*	8270D	Total/NA
Benzo[b]fluoranthene	1.5		0.038	0.0082	mg/Kg	1	*	*	8270D	Total/NA
Benzo[k]fluoranthene	0.58		0.038	0.011	mg/Kg	1	*	*	8270D	Total/NA
Benzo[a]pyrene	0.94		0.038	0.0073	mg/Kg	1	*	*	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.29		0.038	0.0098	mg/Kg	1	*	*	8270D	Total/NA
Dibenz(a,h)anthracene	0.11		0.038	0.0073	mg/Kg	1	*	*	8270D	Total/NA
Benzo[g,h,i]perylene	0.26		0.038	0.012	mg/Kg	1	*	*	8270D	Total/NA
Antimony	0.28	J	1.1	0.21	mg/Kg	1	*	*	6010B	Total/NA
Arsenic	9.2		0.54	0.19	mg/Kg	1	*	*	6010B	Total/NA
Barium	82		0.54	0.062	mg/Kg	1	*	*	6010B	Total/NA
Beryllium	0.59		0.22	0.051	mg/Kg	1	*	*	6010B	Total/NA
Boron	15		2.7	0.25	mg/Kg	1	*	*	6010B	Total/NA
Cadmium	0.43	B	0.11	0.020	mg/Kg	1	*	*	6010B	Total/NA
Calcium	51000	B	110	18	mg/Kg	10	*	*	6010B	Total/NA
Chromium	15		0.54	0.27	mg/Kg	1	*	*	6010B	Total/NA
Cobalt	12		0.27	0.071	mg/Kg	1	*	*	6010B	Total/NA
Copper	42		0.54	0.15	mg/Kg	1	*	*	6010B	Total/NA
Iron	18000		11	5.6	mg/Kg	1	*	*	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5) (Continued)

Lab Sample ID: 500-174927-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	99		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	20000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	29		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2300		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.40	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	420		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.61		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	110		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.098	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0046	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.016		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	2.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.098	J*	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.12		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.047		0.038	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.061	J	0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.064		0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.037	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.34		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.065		0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.37		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.37		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.16		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.20		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.077		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.22		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.074		0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.023	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.10		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	56		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	12		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	31000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.8		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.0		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (5-10) (Continued)

Lab Sample ID: 500-174927-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	10000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	77		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	16000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.6		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	310		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.48	J	0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	49		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.018		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.058	J*	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.048		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.089		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.084		0.079	0.0072	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.30		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.041		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.084		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.069		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.030	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.1		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	36		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.67		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	18		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.24	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	34000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	31		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.53	J	0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		60	8.9	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (10-15) (Continued)

Lab Sample ID: 500-174927-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	1.4		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.52		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.083	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.027		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.067		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J *	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.037		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019	J	0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.032		0.017	0.0074	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.078	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.014	J	0.041	0.0073	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.18		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.045		0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.2		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	18		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.080	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.048		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.033		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.049	J	0.084	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.19		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.048		0.041	0.0083	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.040	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.8		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19		3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000	B	120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	33		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.55	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.90		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.17	J*	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.080		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.041	J	0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.024	J	0.039	0.0071	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.16		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.011	J	0.039	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.037	J	0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.040		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.012	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	21		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000	B	120	20	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (31-39) (Continued)

Lab Sample ID: 500-174927-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	18		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.49	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	56		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.040		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.029	J*	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.090		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.019	0.0083	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.040	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0098	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.13		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.034	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.035	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.30	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.5		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (39-47) (Continued)

Lab Sample ID: 500-174927-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.63		0.59	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.89		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.043		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.072		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174927-8	2615V2-01-B28 (0-5)	Solid	12/11/19 13:45	12/11/19 17:00	
500-174927-9	2615V2-01-B28 (5-10)	Solid	12/11/19 13:50	12/11/19 17:00	
500-174927-10	2615V2-01-B28 (10-15)	Solid	12/11/19 13:55	12/11/19 17:00	
500-174927-11	2615V2-01-B28 (15-23)	Solid	12/11/19 14:05	12/11/19 17:00	
500-174927-12	2615V2-01-B28 (23-31)	Solid	12/11/19 14:15	12/11/19 17:00	
500-174927-13	2615V2-01-B28 (31-39)	Solid	12/11/19 14:20	12/11/19 17:00	
500-174927-14	2615V2-01-B28 (39-47)	Solid	12/11/19 14:30	12/11/19 17:00	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Acetone	0.012	J	0.017	0.0075	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1
Xylenes, Total	<0.0035		0.0035	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 09:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	12/12/19 18:40	12/21/19 09:25	1
4-Bromofluorobenzene (Surr)	104		75 - 131	12/12/19 18:40	12/21/19 09:25	1
Dibromofluoromethane	84		75 - 126	12/12/19 18:40	12/21/19 09:25	1
Toluene-d8 (Surr)	99		75 - 124	12/12/19 18:40	12/21/19 09:25	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Naphthalene	0.10		0.038	0.0058	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2-Methylnaphthalene	0.096		0.076	0.0070	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Acenaphthylene	0.065		0.038	0.0050	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Acenaphthene	0.15		0.038	0.0068	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Dibenzofuran	0.15 J		0.19	0.044	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Fluorene	0.19		0.038	0.0053	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Phenanthrene	1.9		0.038	0.0053	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Anthracene	0.48		0.038	0.0063	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Carbazole	0.22		0.19	0.094	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Fluoranthene	2.4		0.038	0.0070	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Pyrene	2.2		0.038	0.0075	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Benzo[a]anthracene	1.1		0.038	0.0051	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	1.1		0.038	0.010	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Benzo[b]fluoranthene	1.5		0.038	0.0082	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Benzo[k]fluoranthene	0.58		0.038	0.011	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Benzo[a]pyrene	0.94		0.038	0.0073	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Indeno[1,2,3-cd]pyrene	0.29		0.038	0.0098	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Dibenz(a,h)anthracene	0.11		0.038	0.0073	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Benzo[g,h,i]perylene	0.26		0.038	0.012	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/19 17:08	12/26/19 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	121		31 - 166				12/19/19 17:08	12/26/19 19:05	1
Phenol-d5	95		30 - 153				12/19/19 17:08	12/26/19 19:05	1
Nitrobenzene-d5	75		37 - 147				12/19/19 17:08	12/26/19 19:05	1
2-Fluorobiphenyl	74		43 - 145				12/19/19 17:08	12/26/19 19:05	1
2,4,6-Tribromophenol	53		31 - 143				12/19/19 17:08	12/26/19 19:05	1
Terphenyl-d14	92		42 - 157				12/19/19 17:08	12/26/19 19:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.28	J	1.1	0.21	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Arsenic	9.2		0.54	0.19	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Barium	82		0.54	0.062	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Beryllium	0.59		0.22	0.051	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Boron	15		2.7	0.25	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Cadmium	0.43	B	0.11	0.020	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Calcium	51000	B	110	18	mg/Kg	☼	12/17/19 17:17	12/19/19 19:19	10
Chromium	15		0.54	0.27	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Cobalt	12		0.27	0.071	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Copper	42		0.54	0.15	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Iron	18000		11	5.6	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Lead	99		0.27	0.13	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Magnesium	20000		5.4	2.7	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Manganese	310		0.54	0.079	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Nickel	29		0.54	0.16	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Potassium	2300		27	9.6	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Selenium	0.40	J	0.54	0.32	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Silver	1.9		0.27	0.070	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Sodium	420		54	8.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Thallium	0.61		0.54	0.27	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Vanadium	19		0.27	0.064	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1
Zinc	110		1.1	0.48	mg/Kg	☼	12/17/19 17:17	12/18/19 20:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.28	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 09:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 09:56	1
Boron	0.098	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 09:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 87.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0046	J	0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 09:56	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:56	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:56	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 09:56	1
Lead	0.016		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 09:56	1
Manganese	2.2		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:56	1
Nickel	0.027		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:56	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 09:56	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:56	1
Zinc	0.098	J *	0.50	0.020	mg/L		12/26/19 15:19	12/27/19 09:56	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:14	12/28/19 00:42	1
Manganese	<0.025		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 00:42	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 11:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 11:39	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 09:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.018	0.0059	mg/Kg	☼	12/20/19 11:30	12/23/19 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.2	0.2	SU			12/18/19 10:26	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 85.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,2-Dichloropropane	<0.0016		0.0016	0.00043	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Bromodichloromethane	<0.0016		0.0016	0.00034	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/12/19 18:40	12/21/19 09:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	12/12/19 18:40	12/21/19 09:51	1
4-Bromofluorobenzene (Surr)	105		75 - 131	12/12/19 18:40	12/21/19 09:51	1
Dibromofluoromethane	85		75 - 126	12/12/19 18:40	12/21/19 09:51	1
Toluene-d8 (Surr)	90		75 - 124	12/12/19 18:40	12/21/19 09:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Naphthalene	0.047		0.038	0.0058	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2-Methylnaphthalene	0.061 J		0.077	0.0070	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Acenaphthene	0.064		0.038	0.0068	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Fluorene	0.037 J		0.038	0.0053	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Phenanthrene	0.34		0.038	0.0053	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Anthracene	0.065		0.038	0.0063	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Fluoranthene	0.37		0.038	0.0070	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Pyrene	0.37		0.038	0.0076	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Benzo[a]anthracene	0.16		0.038	0.0051	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.20		0.038	0.010	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Benzo[b]fluoranthene	0.077		0.038	0.0082	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Benzo[k]fluoranthene	0.22		0.038	0.011	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Benzo[a]pyrene	0.16		0.038	0.0074	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Indeno[1,2,3-cd]pyrene	0.074		0.038	0.0099	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Dibenz(a,h)anthracene	0.023	J	0.038	0.0073	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Benzo[g,h,i]perylene	0.10		0.038	0.012	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/19/19 17:08	12/27/19 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	133		31 - 166				12/19/19 17:08	12/27/19 18:01	1
Phenol-d5	115		30 - 153				12/19/19 17:08	12/27/19 18:01	1
Nitrobenzene-d5	100		37 - 147				12/19/19 17:08	12/27/19 18:01	1
2-Fluorobiphenyl	106		43 - 145				12/19/19 17:08	12/27/19 18:01	1
2,4,6-Tribromophenol	71		31 - 143				12/19/19 17:08	12/27/19 18:01	1
Terphenyl-d14	131		42 - 157				12/19/19 17:08	12/27/19 18:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.2	0.23	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Arsenic	4.5		0.58	0.20	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Barium	56		0.58	0.066	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Beryllium	0.38		0.23	0.054	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Boron	12		2.9	0.27	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Cadmium	0.21	B	0.12	0.021	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Calcium	31000	B	12	2.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Chromium	9.8		0.58	0.29	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Cobalt	7.0		0.29	0.076	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Copper	15		0.58	0.16	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Iron	10000		12	6.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Lead	77		0.29	0.13	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Magnesium	16000		5.8	2.9	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Manganese	220		0.58	0.084	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Nickel	17		0.58	0.17	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Potassium	1600		29	10	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Selenium	0.43	J	0.58	0.34	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Silver	1.6		0.29	0.075	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Sodium	310		58	8.6	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Thallium	0.48	J	0.58	0.29	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Vanadium	14		0.29	0.069	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1
Zinc	49		1.2	0.51	mg/Kg	☼	12/17/19 17:17	12/18/19 20:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 10:00	1
Boron	0.12	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:00	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 85.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0020	J	0.0050	0.0020	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Cobalt	0.022	J	0.025	0.010	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Iron	<0.40		0.40	0.20	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Lead	0.018		0.0075	0.0075	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Manganese	3.5		0.025	0.010	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Nickel	0.037		0.025	0.010	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Silver	<0.025		0.025	0.010	mg/L	-	12/26/19 15:19	12/27/19 10:00	1
Zinc	0.058	J *	0.50	0.020	mg/L	-	12/26/19 15:19	12/27/19 10:00	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/26/19 15:14	12/28/19 00:54	1
Manganese	0.048		0.025	0.010	mg/L	-	12/26/19 15:14	12/28/19 00:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/26/19 15:19	12/27/19 11:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/26/19 15:19	12/27/19 11:45	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/27/19 09:45	12/30/19 09:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.089		0.018	0.0060	mg/Kg	☼	12/20/19 11:30	12/23/19 08:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU	-		12/18/19 10:30	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Acetone	<0.016		0.016	0.0072	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/12/19 18:40	12/21/19 10:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 134	12/12/19 18:40	12/21/19 10:27	1
4-Bromofluorobenzene (Surr)	91		75 - 131	12/12/19 18:40	12/21/19 10:27	1
Dibromofluoromethane	92		75 - 126	12/12/19 18:40	12/21/19 10:27	1
Toluene-d8 (Surr)	110		75 - 124	12/12/19 18:40	12/21/19 10:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2-Methylnaphthalene	0.084		0.079	0.0072	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Phenanthrene	0.30		0.039	0.0055	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Fluoranthene	0.041		0.039	0.0073	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Pyrene	0.084		0.039	0.0078	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.069		0.039	0.011	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
Benzo[g,h,i]perylene	0.030	J	0.039	0.013	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/19/19 17:08	12/30/19 00:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	146		31 - 166	12/19/19 17:08	12/30/19 00:56	1
Phenol-d5	117		30 - 153	12/19/19 17:08	12/30/19 00:56	1
Nitrobenzene-d5	107		37 - 147	12/19/19 17:08	12/30/19 00:56	1
2-Fluorobiphenyl	102		43 - 145	12/19/19 17:08	12/30/19 00:56	1
2,4,6-Tribromophenol	82		31 - 143	12/19/19 17:08	12/30/19 00:56	1
Terphenyl-d14	120		42 - 157	12/19/19 17:08	12/30/19 00:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Arsenic	8.1		0.60	0.20	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Barium	36		0.60	0.068	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Beryllium	0.67		0.24	0.056	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Boron	18		3.0	0.28	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Cadmium	0.24	B	0.12	0.022	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Calcium	34000	B	12	2.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Chromium	16		0.60	0.30	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Copper	31		0.60	0.17	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Iron	19000		12	6.2	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Lead	17		0.30	0.14	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Magnesium	19000		6.0	3.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Manganese	290		0.60	0.087	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Nickel	37		0.60	0.17	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Potassium	3200		30	11	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Selenium	0.53	J	0.60	0.35	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Silver	2.1		0.30	0.077	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Sodium	180		60	8.9	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Thallium	1.4		0.60	0.30	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1
Zinc	53		1.2	0.53	mg/Kg	☼	12/17/19 17:17	12/18/19 20:51	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.52		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:05	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 10:05	1
Boron	0.083	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 82.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 10:05	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:05	1
Cobalt	0.027		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:05	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 10:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 10:05	1
Manganese	1.9		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:05	1
Nickel	0.067		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:05	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 10:05	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:05	1
Zinc	0.024	J *	0.50	0.020	mg/L		12/26/19 15:19	12/27/19 10:05	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.037		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 00:58	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 11:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 11:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.020	0.0065	mg/Kg	☼	12/20/19 11:30	12/23/19 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/18/19 10:34	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Date Collected: 12/11/19 14:05

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Acetone	0.032		0.017	0.0074	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 10:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	12/12/19 18:40	12/21/19 10:53	1
4-Bromofluorobenzene (Surr)	101		75 - 131	12/12/19 18:40	12/21/19 10:53	1
Dibromofluoromethane	89		75 - 126	12/12/19 18:40	12/21/19 10:53	1
Toluene-d8 (Surr)	98		75 - 124	12/12/19 18:40	12/21/19 10:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Date Collected: 12/11/19 14:05

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2-Methylnaphthalene	0.078	J	0.082	0.0075	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Acenaphthene	0.014	J	0.041	0.0073	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Fluorene	0.013	J	0.041	0.0057	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Phenanthrene	0.18		0.041	0.0057	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Pyrene	0.045		0.041	0.0081	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Date Collected: 12/11/19 14:05

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/19/19 17:08	12/26/19 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	147		31 - 166				12/19/19 17:08	12/26/19 20:04	1
Phenol-d5	117		30 - 153				12/19/19 17:08	12/26/19 20:04	1
Nitrobenzene-d5	96		37 - 147				12/19/19 17:08	12/26/19 20:04	1
2-Fluorobiphenyl	93		43 - 145				12/19/19 17:08	12/26/19 20:04	1
2,4,6-Tribromophenol	81		31 - 143				12/19/19 17:08	12/26/19 20:04	1
Terphenyl-d14	125		42 - 157				12/19/19 17:08	12/26/19 20:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Arsenic	7.2		0.58	0.20	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Barium	38		0.58	0.066	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Beryllium	0.64		0.23	0.054	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Boron	18		2.9	0.27	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Cadmium	0.18 B		0.12	0.021	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Calcium	58000 B		120	20	mg/Kg	☼	12/17/19 17:17	12/19/19 19:23	10
Chromium	16		0.58	0.29	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Copper	26		0.58	0.16	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Iron	18000		12	6.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Lead	13		0.29	0.13	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Magnesium	24000		5.8	2.9	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Manganese	320		0.58	0.084	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Nickel	33		0.58	0.17	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Potassium	3100		29	10	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Selenium	0.54 J		0.58	0.34	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Silver	2.1		0.29	0.074	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Sodium	180		58	8.5	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Thallium	1.0		0.58	0.29	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Vanadium	20		0.29	0.068	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1
Zinc	53		1.2	0.51	mg/Kg	☼	12/17/19 17:17	12/18/19 20:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:09	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 10:09	1
Boron	0.080 J		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:09	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Date Collected: 12/11/19 14:05

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 10:09	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:09	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:09	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 10:09	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 10:09	1
Manganese	2.0		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:09	1
Nickel	0.048		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:09	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 10:09	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:09	1
Zinc	<0.50	*	0.50	0.020	mg/L		12/26/19 15:19	12/27/19 10:09	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.033		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 01:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 11:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 11:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 10:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.019	0.0062	mg/Kg	☼	12/20/19 11:30	12/23/19 08:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/18/19 10:39	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Date Collected: 12/11/19 14:15

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 11:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 134	12/12/19 18:40	12/21/19 11:18	1
4-Bromofluorobenzene (Surr)	96		75 - 131	12/12/19 18:40	12/21/19 11:18	1
Dibromofluoromethane	88		75 - 126	12/12/19 18:40	12/21/19 11:18	1
Toluene-d8 (Surr)	88		75 - 124	12/12/19 18:40	12/21/19 11:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Date Collected: 12/11/19 14:15

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2-Methylnaphthalene	0.049	J	0.084	0.0076	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Phenanthrene	0.19		0.041	0.0058	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Pyrene	0.048		0.041	0.0083	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Date Collected: 12/11/19 14:15

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.040	J	0.041	0.011	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/19/19 17:08	12/26/19 20:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	156		31 - 166				12/19/19 17:08	12/26/19 20:33	1
Phenol-d5	130		30 - 153				12/19/19 17:08	12/26/19 20:33	1
Nitrobenzene-d5	104		37 - 147				12/19/19 17:08	12/26/19 20:33	1
2-Fluorobiphenyl	99		43 - 145				12/19/19 17:08	12/26/19 20:33	1
2,4,6-Tribromophenol	86		31 - 143				12/19/19 17:08	12/26/19 20:33	1
Terphenyl-d14	134		42 - 157				12/19/19 17:08	12/26/19 20:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Arsenic	6.8		0.61	0.21	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Barium	40		0.61	0.069	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Beryllium	0.66		0.24	0.057	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Boron	19		3.0	0.28	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Cadmium	0.17	B	0.12	0.022	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Calcium	59000	B	120	21	mg/Kg	☼	12/17/19 17:17	12/19/19 19:27	10
Chromium	17		0.61	0.30	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Cobalt	13		0.30	0.080	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Copper	24		0.61	0.17	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Iron	19000		12	6.3	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Lead	13		0.30	0.14	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Magnesium	22000		6.1	3.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Manganese	300		0.61	0.088	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Nickel	33		0.61	0.18	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Potassium	3200		30	11	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Selenium	0.55	J	0.61	0.36	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Silver	2.2		0.30	0.078	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Sodium	190		61	9.0	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Thallium	0.90		0.61	0.30	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Vanadium	21		0.30	0.072	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1
Zinc	52		1.2	0.53	mg/Kg	☼	12/17/19 17:17	12/18/19 20:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 10:13	1
Boron	0.10	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:13	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Date Collected: 12/11/19 14:15

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 10:13	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:13	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:13	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 10:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 10:13	1
Manganese	1.8		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:13	1
Nickel	0.037		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:13	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 10:13	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:13	1
Zinc	0.17	J*	0.50	0.020	mg/L		12/26/19 15:19	12/27/19 10:13	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.080		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 01:06	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 11:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 11:51	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 10:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.020	0.0067	mg/Kg	☼	12/20/19 11:30	12/23/19 08:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/18/19 10:43	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/12/19 18:40	12/21/19 11:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	12/12/19 18:40	12/21/19 11:44	1
4-Bromofluorobenzene (Surr)	100		75 - 131	12/12/19 18:40	12/21/19 11:44	1
Dibromofluoromethane	90		75 - 126	12/12/19 18:40	12/21/19 11:44	1
Toluene-d8 (Surr)	99		75 - 124	12/12/19 18:40	12/21/19 11:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,4,5-Trichlorophenol	<0.39		0.39	0.091	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2-Methylnaphthalene	0.041	J	0.080	0.0073	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Acenaphthene	0.024	J	0.039	0.0071	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Phenanthrene	0.16		0.039	0.0055	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Fluoranthene	0.011	J	0.039	0.0074	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Pyrene	0.037	J	0.039	0.0079	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Benzof[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.040		0.039	0.011	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Benzo[a]pyrene	0.012	J	0.039	0.0077	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/19/19 17:08	12/27/19 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	142		31 - 166				12/19/19 17:08	12/27/19 18:59	1
Phenol-d5	124		30 - 153				12/19/19 17:08	12/27/19 18:59	1
Nitrobenzene-d5	101		37 - 147				12/19/19 17:08	12/27/19 18:59	1
2-Fluorobiphenyl	117		43 - 145				12/19/19 17:08	12/27/19 18:59	1
2,4,6-Tribromophenol	76		31 - 143				12/19/19 17:08	12/27/19 18:59	1
Terphenyl-d14	158	X	42 - 157				12/19/19 17:08	12/27/19 18:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Arsenic	7.4		0.58	0.20	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Barium	41		0.58	0.066	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Beryllium	0.70		0.23	0.054	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Boron	21		2.9	0.27	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Cadmium	0.19	B	0.12	0.021	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Calcium	55000	B	120	20	mg/Kg	☼	12/17/19 17:17	12/19/19 19:31	10
Chromium	18		0.58	0.29	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Copper	27		0.58	0.16	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Iron	20000		12	6.0	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Lead	14		0.29	0.13	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Magnesium	22000		5.8	2.9	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Manganese	300		0.58	0.084	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Nickel	36		0.58	0.17	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Potassium	3400		29	10	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Selenium	0.49	J	0.58	0.34	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Silver	2.3		0.29	0.075	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Sodium	210		58	8.6	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Vanadium	22		0.29	0.068	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1
Zinc	56		1.2	0.51	mg/Kg	☼	12/17/19 17:17	12/18/19 21:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 10:17	1
Boron	0.11	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:17	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 10:17	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:17	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:17	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 10:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 10:17	1
Manganese	1.8		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:17	1
Nickel	0.040		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:17	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 10:17	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:17	1
Zinc	0.029	J *	0.50	0.020	mg/L		12/26/19 15:19	12/27/19 10:17	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.090		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 01:10	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 11:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 11:53	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 10:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.019	0.0064	mg/Kg	☼	12/20/19 11:30	12/23/19 08:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/18/19 10:47	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Acetone	0.011	J	0.019	0.0083	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	12/12/19 18:40	12/21/19 12:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 134	12/12/19 18:40	12/21/19 12:10	1
4-Bromofluorobenzene (Surr)	107		75 - 131	12/12/19 18:40	12/21/19 12:10	1
Dibromofluoromethane	94		75 - 126	12/12/19 18:40	12/21/19 12:10	1
Toluene-d8 (Surr)	99		75 - 124	12/12/19 18:40	12/21/19 12:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2-Methylnaphthalene	0.040	J	0.081	0.0074	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Fluorene	0.0098	J	0.040	0.0056	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Phenanthrene	0.13		0.040	0.0056	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Pyrene	0.034	J	0.040	0.0079	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.035	J	0.040	0.011	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Benzo[g,h,i]perylene	0.025	J	0.040	0.013	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/19/19 17:08	12/27/19 19:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	126		31 - 166				12/19/19 17:08	12/27/19 19:27	1
Phenol-d5	101		30 - 153				12/19/19 17:08	12/27/19 19:27	1
Nitrobenzene-d5	89		37 - 147				12/19/19 17:08	12/27/19 19:27	1
2-Fluorobiphenyl	99		43 - 145				12/19/19 17:08	12/27/19 19:27	1
2,4,6-Tribromophenol	52		31 - 143				12/19/19 17:08	12/27/19 19:27	1
Terphenyl-d14	128		42 - 157				12/19/19 17:08	12/27/19 19:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.2	0.23	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Arsenic	7.5		0.59	0.20	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Barium	40		0.59	0.067	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Beryllium	0.70		0.23	0.055	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Boron	18	B	2.9	0.27	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Cadmium	0.17	B	0.12	0.021	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Calcium	53000		120	20	mg/Kg	☼	12/18/19 18:04	12/20/19 13:29	10
Chromium	17		0.59	0.29	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Cobalt	14		0.29	0.077	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Copper	26		0.59	0.16	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Iron	20000	B	12	6.1	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Lead	14		0.29	0.14	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Magnesium	24000		5.9	2.9	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Manganese	320		0.59	0.085	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Potassium	3200		29	10	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Selenium	0.63		0.59	0.34	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Silver	1.9		0.29	0.076	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Sodium	200		59	8.7	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Thallium	0.89		0.59	0.29	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Vanadium	20		0.29	0.069	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1
Zinc	60		1.2	0.51	mg/Kg	☼	12/18/19 18:04	12/19/19 18:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 10:34	1
Boron	0.11	J	0.50	0.050	mg/L		12/26/19 15:19	12/27/19 10:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 10:34	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:34	1
Cobalt	0.017	J	0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:34	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 10:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 10:34	1
Manganese	1.8		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:34	1
Nickel	0.043		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:34	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 10:34	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 10:34	1
Zinc	<0.50	*	0.50	0.020	mg/L		12/26/19 15:19	12/27/19 10:34	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.072		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 01:14	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 12:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 12:02	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 10:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.020	0.0068	mg/Kg	☼	12/20/19 11:30	12/23/19 09:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.2	0.2	SU			12/18/19 10:56	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

GC/MS VOA

Prep Batch: 520663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	5035	
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	5035	
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	5035	
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	5035	
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	5035	
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	5035	
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	5035	
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	5035	
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	5035	
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	5035	
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	5035	
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	5035	
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	5035	
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	5035	

Analysis Batch: 521704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	8260B	520663
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	8260B	520663
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	8260B	520663
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	8260B	520663
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	8260B	520663
MB 500-521704/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-521704/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-521704/30	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 521750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	8260B	520663
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	8260B	520663
MB 500-521750/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-521750/29	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 521852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	8260B	520663
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	8260B	520663
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	8260B	520663
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	8260B	520663
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	8260B	520663
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	8260B	520663
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	8260B	520663
MB 500-521852/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-521852/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-521852/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 521605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

GC/MS Semi VOA (Continued)

Prep Batch: 521605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	3541	
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	3541	
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	3541	
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	3541	
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	3541	
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	3541	
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	3541	
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	3541	
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	3541	
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	3541	
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	3541	
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	3541	
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	3541	
MB 500-521605/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-521605/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-174927-2 MS	2615V2-01-B31 (5-10)	Total/NA	Solid	3541	
500-174927-2 MSD	2615V2-01-B31 (5-10)	Total/NA	Solid	3541	

Analysis Batch: 522137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521605/1-A	Method Blank	Total/NA	Solid	8270D	521605
LCS 500-521605/2-A	Lab Control Sample	Total/NA	Solid	8270D	521605

Analysis Batch: 522447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	8270D	521605
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	8270D	521605
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	8270D	521605
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	8270D	521605
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	8270D	521605
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	8270D	521605
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	8270D	521605
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	8270D	521605
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	8270D	521605
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	8270D	521605
500-174927-2 MS	2615V2-01-B31 (5-10)	Total/NA	Solid	8270D	521605
500-174927-2 MSD	2615V2-01-B31 (5-10)	Total/NA	Solid	8270D	521605

Analysis Batch: 522744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	8270D	521605
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	8270D	521605
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	8270D	521605

Analysis Batch: 522897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	8270D	521605

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Metals

Prep Batch: 521134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	3050B	
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	3050B	
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	3050B	
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	3050B	
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	3050B	
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	3050B	
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	3050B	
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	3050B	
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	3050B	
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	3050B	
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	3050B	
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	3050B	
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	3050B	
MB 500-521134/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-521134/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 521387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	3050B	
MB 500-521387/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-521387/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 521401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	6010B	521134
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	6010B	521134
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	6010B	521134
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	6010B	521134
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	6010B	521134
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	6010B	521134
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	6010B	521134
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	6010B	521134
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	6010B	521134
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	6010B	521134
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	6010B	521134
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	6010B	521134
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	6010B	521134
MB 500-521134/1-A	Method Blank	Total/NA	Solid	6010B	521134
LCS 500-521134/2-A	Lab Control Sample	Total/NA	Solid	6010B	521134

Analysis Batch: 521531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	6010B	521134

Analysis Batch: 521634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	6010B	521387
MB 500-521387/1-A	Method Blank	Total/NA	Solid	6010B	521387
LCS 500-521387/2-A	Lab Control Sample	Total/NA	Solid	6010B	521387

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Metals

Analysis Batch: 521646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	6010B	521134
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	6010B	521134
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	6010B	521134
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	6010B	521134
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	6010B	521134
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	6010B	521134
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	6010B	521134
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	6010B	521134
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	6010B	521134
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	6010B	521134
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	6010B	521134

Prep Batch: 521649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	7471B	
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	7471B	
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	7471B	
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	7471B	
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	7471B	
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	7471B	
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	7471B	
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	7471B	
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	7471B	
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	7471B	
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	7471B	
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	7471B	
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	7471B	
MB 500-521649/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521649/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-174927-10 MS	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	
500-174927-10 MSD	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	
500-174927-10 DU	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	

Analysis Batch: 522047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	6010B	521387

Analysis Batch: 522162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	7471B	521649
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	7471B	521649
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	7471B	521649
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	7471B	521649
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	7471B	521649
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	7471B	521649
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	7471B	521649
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	7471B	521649
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	7471B	521649
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	521649
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	7471B	521649

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Metals (Continued)

Analysis Batch: 522162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	7471B	521649
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	7471B	521649
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	7471B	521649
MB 500-521649/12-A	Method Blank	Total/NA	Solid	7471B	521649
LCS 500-521649/13-A	Lab Control Sample	Total/NA	Solid	7471B	521649
500-174927-10 MS	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	521649
500-174927-10 MSD	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	521649
500-174927-10 DU	2615V2-01-B28 (10-15)	Total/NA	Solid	7471B	521649

Leach Batch: 522371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	SPLP East	Solid	1312	
500-174927-2	2615V2-01-B31 (5-10)	SPLP East	Solid	1312	
500-174927-3	2615V2-01-B31 (10-15)	SPLP East	Solid	1312	
500-174927-4	2615V2-01-B31 (15-23)	SPLP East	Solid	1312	
500-174927-5	2615V2-01-B31 (23-31)	SPLP East	Solid	1312	
500-174927-6	2615V2-01-B31 (31-39)	SPLP East	Solid	1312	
500-174927-7	2615V2-01-B31 (39-47)	SPLP East	Solid	1312	
500-174927-8	2615V2-01-B28 (0-5)	SPLP East	Solid	1312	
500-174927-9	2615V2-01-B28 (5-10)	SPLP East	Solid	1312	
500-174927-10	2615V2-01-B28 (10-15)	SPLP East	Solid	1312	
500-174927-11	2615V2-01-B28 (15-23)	SPLP East	Solid	1312	
500-174927-12	2615V2-01-B28 (23-31)	SPLP East	Solid	1312	
500-174927-13	2615V2-01-B28 (31-39)	SPLP East	Solid	1312	
500-174927-14	2615V2-01-B28 (39-47)	SPLP East	Solid	1312	
LB 500-522371/1-B	Method Blank	SPLP East	Solid	1312	
500-174927-14 MS	2615V2-01-B28 (39-47)	SPLP East	Solid	1312	
500-174927-14 DU	2615V2-01-B28 (39-47)	SPLP East	Solid	1312	

Leach Batch: 522374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	TCLP	Solid	1311	
500-174927-2	2615V2-01-B31 (5-10)	TCLP	Solid	1311	
500-174927-3	2615V2-01-B31 (10-15)	TCLP	Solid	1311	
500-174927-4	2615V2-01-B31 (15-23)	TCLP	Solid	1311	
500-174927-5	2615V2-01-B31 (23-31)	TCLP	Solid	1311	
500-174927-6	2615V2-01-B31 (31-39)	TCLP	Solid	1311	
500-174927-7	2615V2-01-B31 (39-47)	TCLP	Solid	1311	
500-174927-8	2615V2-01-B28 (0-5)	TCLP	Solid	1311	
500-174927-9	2615V2-01-B28 (5-10)	TCLP	Solid	1311	
500-174927-10	2615V2-01-B28 (10-15)	TCLP	Solid	1311	
500-174927-11	2615V2-01-B28 (15-23)	TCLP	Solid	1311	
500-174927-12	2615V2-01-B28 (23-31)	TCLP	Solid	1311	
500-174927-13	2615V2-01-B28 (31-39)	TCLP	Solid	1311	
500-174927-14	2615V2-01-B28 (39-47)	TCLP	Solid	1311	
LB 500-522374/1-B	Method Blank	TCLP	Solid	1311	
LB 500-522374/1-C	Method Blank	TCLP	Solid	1311	
500-174927-11 MS	2615V2-01-B28 (15-23)	TCLP	Solid	1311	
500-174927-11 MSD	2615V2-01-B28 (15-23)	TCLP	Solid	1311	
500-174927-13 MS	2615V2-01-B28 (31-39)	TCLP	Solid	1311	
500-174927-11 DU	2615V2-01-B28 (15-23)	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Metals (Continued)

Leach Batch: 522374 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-13 DU	2615V2-01-B28 (31-39)	TCLP	Solid	1311	

Prep Batch: 522549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	SPLP East	Solid	3010A	522371
500-174927-2	2615V2-01-B31 (5-10)	SPLP East	Solid	3010A	522371
500-174927-3	2615V2-01-B31 (10-15)	SPLP East	Solid	3010A	522371
500-174927-4	2615V2-01-B31 (15-23)	SPLP East	Solid	3010A	522371
500-174927-5	2615V2-01-B31 (23-31)	SPLP East	Solid	3010A	522371
500-174927-6	2615V2-01-B31 (31-39)	SPLP East	Solid	3010A	522371
500-174927-7	2615V2-01-B31 (39-47)	SPLP East	Solid	3010A	522371
500-174927-8	2615V2-01-B28 (0-5)	SPLP East	Solid	3010A	522371
500-174927-9	2615V2-01-B28 (5-10)	SPLP East	Solid	3010A	522371
500-174927-10	2615V2-01-B28 (10-15)	SPLP East	Solid	3010A	522371
500-174927-11	2615V2-01-B28 (15-23)	SPLP East	Solid	3010A	522371
500-174927-12	2615V2-01-B28 (23-31)	SPLP East	Solid	3010A	522371
500-174927-13	2615V2-01-B28 (31-39)	SPLP East	Solid	3010A	522371
500-174927-14	2615V2-01-B28 (39-47)	SPLP East	Solid	3010A	522371
LB 500-522371/1-B	Method Blank	SPLP East	Solid	3010A	522371
LCS 500-522549/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174927-14 MS	2615V2-01-B28 (39-47)	SPLP East	Solid	3010A	522371
500-174927-14 DU	2615V2-01-B28 (39-47)	SPLP East	Solid	3010A	522371

Prep Batch: 522552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	TCLP	Solid	3010A	522374
500-174927-2	2615V2-01-B31 (5-10)	TCLP	Solid	3010A	522374
500-174927-3	2615V2-01-B31 (10-15)	TCLP	Solid	3010A	522374
500-174927-4	2615V2-01-B31 (15-23)	TCLP	Solid	3010A	522374
500-174927-5	2615V2-01-B31 (23-31)	TCLP	Solid	3010A	522374
500-174927-6	2615V2-01-B31 (31-39)	TCLP	Solid	3010A	522374
500-174927-7	2615V2-01-B31 (39-47)	TCLP	Solid	3010A	522374
500-174927-8	2615V2-01-B28 (0-5)	TCLP	Solid	3010A	522374
500-174927-9	2615V2-01-B28 (5-10)	TCLP	Solid	3010A	522374
500-174927-10	2615V2-01-B28 (10-15)	TCLP	Solid	3010A	522374
500-174927-11	2615V2-01-B28 (15-23)	TCLP	Solid	3010A	522374
500-174927-12	2615V2-01-B28 (23-31)	TCLP	Solid	3010A	522374
500-174927-13	2615V2-01-B28 (31-39)	TCLP	Solid	3010A	522374
500-174927-14	2615V2-01-B28 (39-47)	TCLP	Solid	3010A	522374
LB 500-522374/1-B	Method Blank	TCLP	Solid	3010A	522374
LCS 500-522552/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174927-13 MS	2615V2-01-B28 (31-39)	TCLP	Solid	3010A	522374
500-174927-13 DU	2615V2-01-B28 (31-39)	TCLP	Solid	3010A	522374

Prep Batch: 522701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	TCLP	Solid	7470A	522374
500-174927-2	2615V2-01-B31 (5-10)	TCLP	Solid	7470A	522374
500-174927-3	2615V2-01-B31 (10-15)	TCLP	Solid	7470A	522374
500-174927-4	2615V2-01-B31 (15-23)	TCLP	Solid	7470A	522374
500-174927-5	2615V2-01-B31 (23-31)	TCLP	Solid	7470A	522374

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Metals (Continued)

Prep Batch: 522701 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-6	2615V2-01-B31 (31-39)	TCLP	Solid	7470A	522374
500-174927-7	2615V2-01-B31 (39-47)	TCLP	Solid	7470A	522374
500-174927-8	2615V2-01-B28 (0-5)	TCLP	Solid	7470A	522374
500-174927-9	2615V2-01-B28 (5-10)	TCLP	Solid	7470A	522374
500-174927-10	2615V2-01-B28 (10-15)	TCLP	Solid	7470A	522374
500-174927-11	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522374
500-174927-12	2615V2-01-B28 (23-31)	TCLP	Solid	7470A	522374
500-174927-13	2615V2-01-B28 (31-39)	TCLP	Solid	7470A	522374
500-174927-14	2615V2-01-B28 (39-47)	TCLP	Solid	7470A	522374
LB 500-522374/1-C	Method Blank	TCLP	Solid	7470A	522374
MB 500-522701/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-522701/15-A	Lab Control Sample	Total/NA	Solid	7470A	
500-174927-11 MS	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522374
500-174927-11 MSD	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522374
500-174927-11 DU	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522374

Analysis Batch: 522718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	TCLP	Solid	6010B	522552
500-174927-2	2615V2-01-B31 (5-10)	TCLP	Solid	6010B	522552
500-174927-3	2615V2-01-B31 (10-15)	TCLP	Solid	6010B	522552
500-174927-4	2615V2-01-B31 (15-23)	TCLP	Solid	6010B	522552
500-174927-5	2615V2-01-B31 (23-31)	TCLP	Solid	6010B	522552
500-174927-6	2615V2-01-B31 (31-39)	TCLP	Solid	6010B	522552
500-174927-7	2615V2-01-B31 (39-47)	TCLP	Solid	6010B	522552
500-174927-8	2615V2-01-B28 (0-5)	TCLP	Solid	6010B	522552
500-174927-9	2615V2-01-B28 (5-10)	TCLP	Solid	6010B	522552
500-174927-10	2615V2-01-B28 (10-15)	TCLP	Solid	6010B	522552
500-174927-11	2615V2-01-B28 (15-23)	TCLP	Solid	6010B	522552
500-174927-12	2615V2-01-B28 (23-31)	TCLP	Solid	6010B	522552
500-174927-13	2615V2-01-B28 (31-39)	TCLP	Solid	6010B	522552
500-174927-14	2615V2-01-B28 (39-47)	TCLP	Solid	6010B	522552
LB 500-522374/1-B	Method Blank	TCLP	Solid	6010B	522552
LCS 500-522552/2-A	Lab Control Sample	Total/NA	Solid	6010B	522552
500-174927-13 MS	2615V2-01-B28 (31-39)	TCLP	Solid	6010B	522552
500-174927-13 DU	2615V2-01-B28 (31-39)	TCLP	Solid	6010B	522552

Analysis Batch: 522770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	TCLP	Solid	6020A	522552
500-174927-2	2615V2-01-B31 (5-10)	TCLP	Solid	6020A	522552
500-174927-3	2615V2-01-B31 (10-15)	TCLP	Solid	6020A	522552
500-174927-4	2615V2-01-B31 (15-23)	TCLP	Solid	6020A	522552
500-174927-5	2615V2-01-B31 (23-31)	TCLP	Solid	6020A	522552
500-174927-6	2615V2-01-B31 (31-39)	TCLP	Solid	6020A	522552
500-174927-7	2615V2-01-B31 (39-47)	TCLP	Solid	6020A	522552
500-174927-8	2615V2-01-B28 (0-5)	TCLP	Solid	6020A	522552
500-174927-9	2615V2-01-B28 (5-10)	TCLP	Solid	6020A	522552
500-174927-10	2615V2-01-B28 (10-15)	TCLP	Solid	6020A	522552
500-174927-11	2615V2-01-B28 (15-23)	TCLP	Solid	6020A	522552
500-174927-12	2615V2-01-B28 (23-31)	TCLP	Solid	6020A	522552

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QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Metals (Continued)

Analysis Batch: 522770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-13	2615V2-01-B28 (31-39)	TCLP	Solid	6020A	522552
500-174927-14	2615V2-01-B28 (39-47)	TCLP	Solid	6020A	522552
LB 500-522374/1-B	Method Blank	TCLP	Solid	6020A	522552
LCS 500-522552/2-A	Lab Control Sample	Total/NA	Solid	6020A	522552
500-174927-13 MS	2615V2-01-B28 (31-39)	TCLP	Solid	6020A	522552
500-174927-13 DU	2615V2-01-B28 (31-39)	TCLP	Solid	6020A	522552

Analysis Batch: 522936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	SPLP East	Solid	6010B	522549
500-174927-2	2615V2-01-B31 (5-10)	SPLP East	Solid	6010B	522549
500-174927-3	2615V2-01-B31 (10-15)	SPLP East	Solid	6010B	522549
500-174927-4	2615V2-01-B31 (15-23)	SPLP East	Solid	6010B	522549
500-174927-5	2615V2-01-B31 (23-31)	SPLP East	Solid	6010B	522549
500-174927-6	2615V2-01-B31 (31-39)	SPLP East	Solid	6010B	522549
500-174927-7	2615V2-01-B31 (39-47)	SPLP East	Solid	6010B	522549
500-174927-8	2615V2-01-B28 (0-5)	SPLP East	Solid	6010B	522549
500-174927-9	2615V2-01-B28 (5-10)	SPLP East	Solid	6010B	522549
500-174927-10	2615V2-01-B28 (10-15)	SPLP East	Solid	6010B	522549
500-174927-11	2615V2-01-B28 (15-23)	SPLP East	Solid	6010B	522549
500-174927-12	2615V2-01-B28 (23-31)	SPLP East	Solid	6010B	522549
500-174927-13	2615V2-01-B28 (31-39)	SPLP East	Solid	6010B	522549
500-174927-14	2615V2-01-B28 (39-47)	SPLP East	Solid	6010B	522549
LB 500-522371/1-B	Method Blank	SPLP East	Solid	6010B	522549
LCS 500-522549/2-A	Lab Control Sample	Total/NA	Solid	6010B	522549
500-174927-14 MS	2615V2-01-B28 (39-47)	SPLP East	Solid	6010B	522549
500-174927-14 DU	2615V2-01-B28 (39-47)	SPLP East	Solid	6010B	522549

Analysis Batch: 523072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	TCLP	Solid	7470A	522701
500-174927-2	2615V2-01-B31 (5-10)	TCLP	Solid	7470A	522701
500-174927-3	2615V2-01-B31 (10-15)	TCLP	Solid	7470A	522701
500-174927-4	2615V2-01-B31 (15-23)	TCLP	Solid	7470A	522701
500-174927-5	2615V2-01-B31 (23-31)	TCLP	Solid	7470A	522701
500-174927-6	2615V2-01-B31 (31-39)	TCLP	Solid	7470A	522701
500-174927-7	2615V2-01-B31 (39-47)	TCLP	Solid	7470A	522701
500-174927-8	2615V2-01-B28 (0-5)	TCLP	Solid	7470A	522701
500-174927-9	2615V2-01-B28 (5-10)	TCLP	Solid	7470A	522701
500-174927-10	2615V2-01-B28 (10-15)	TCLP	Solid	7470A	522701
500-174927-11	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522701
500-174927-12	2615V2-01-B28 (23-31)	TCLP	Solid	7470A	522701
500-174927-13	2615V2-01-B28 (31-39)	TCLP	Solid	7470A	522701
500-174927-14	2615V2-01-B28 (39-47)	TCLP	Solid	7470A	522701
LB 500-522374/1-C	Method Blank	TCLP	Solid	7470A	522701
MB 500-522701/12-A	Method Blank	Total/NA	Solid	7470A	522701
LCS 500-522701/15-A	Lab Control Sample	Total/NA	Solid	7470A	522701
500-174927-11 MS	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522701
500-174927-11 MSD	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522701
500-174927-11 DU	2615V2-01-B28 (15-23)	TCLP	Solid	7470A	522701

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

General Chemistry

Analysis Batch: 521066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	Moisture	
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	Moisture	
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	Moisture	
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	Moisture	
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	Moisture	
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	Moisture	
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	Moisture	
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	Moisture	
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	Moisture	
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	Moisture	
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	Moisture	
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	Moisture	
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	Moisture	
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	Moisture	
500-174927-8 DU	2615V2-01-B28 (0-5)	Total/NA	Solid	Moisture	

Analysis Batch: 521159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174927-1	2615V2-01-B31 (0-5)	Total/NA	Solid	9045D	
500-174927-2	2615V2-01-B31 (5-10)	Total/NA	Solid	9045D	
500-174927-3	2615V2-01-B31 (10-15)	Total/NA	Solid	9045D	
500-174927-4	2615V2-01-B31 (15-23)	Total/NA	Solid	9045D	
500-174927-5	2615V2-01-B31 (23-31)	Total/NA	Solid	9045D	
500-174927-6	2615V2-01-B31 (31-39)	Total/NA	Solid	9045D	
500-174927-7	2615V2-01-B31 (39-47)	Total/NA	Solid	9045D	
500-174927-8	2615V2-01-B28 (0-5)	Total/NA	Solid	9045D	
500-174927-9	2615V2-01-B28 (5-10)	Total/NA	Solid	9045D	
500-174927-10	2615V2-01-B28 (10-15)	Total/NA	Solid	9045D	
500-174927-11	2615V2-01-B28 (15-23)	Total/NA	Solid	9045D	
500-174927-12	2615V2-01-B28 (23-31)	Total/NA	Solid	9045D	
500-174927-13	2615V2-01-B28 (31-39)	Total/NA	Solid	9045D	
500-174927-14	2615V2-01-B28 (39-47)	Total/NA	Solid	9045D	
LCS 500-521159/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-521159/6	Lab Control Sample Dup	Total/NA	Solid	9045D	
500-174927-14 DU	2615V2-01-B28 (39-47)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174927-1	2615V2-01-B31 (0-5)	92	103	87	88
500-174927-2	2615V2-01-B31 (5-10)	90	104	80	98
500-174927-3	2615V2-01-B31 (10-15)	105	100	99	87
500-174927-4	2615V2-01-B31 (15-23)	98	104	96	99
500-174927-5	2615V2-01-B31 (23-31)	99	100	90	87
500-174927-6	2615V2-01-B31 (31-39)	94	97	99	93
500-174927-7	2615V2-01-B31 (39-47)	100	96	99	92
500-174927-8	2615V2-01-B28 (0-5)	93	104	84	99
500-174927-9	2615V2-01-B28 (5-10)	93	105	85	90
500-174927-10	2615V2-01-B28 (10-15)	100	91	92	110
500-174927-11	2615V2-01-B28 (15-23)	93	101	89	98
500-174927-12	2615V2-01-B28 (23-31)	93	96	88	88
500-174927-13	2615V2-01-B28 (31-39)	95	100	90	99
500-174927-14	2615V2-01-B28 (39-47)	102	107	94	99
LCS 500-521704/4	Lab Control Sample	84	91	85	96
LCS 500-521750/29	Lab Control Sample	90	81	96	89
LCS 500-521852/4	Lab Control Sample	86	93	78	98
LCSD 500-521704/30	Lab Control Sample Dup	91	90	88	90
LCSD 500-521852/7	Lab Control Sample Dup	88	94	83	98
MB 500-521704/6	Method Blank	89	95	88	87
MB 500-521750/6	Method Blank	90	93	97	89
MB 500-521852/6	Method Blank	89	97	82	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174927-1	2615V2-01-B31 (0-5)	153	122	96	92	82	126
500-174927-2	2615V2-01-B31 (5-10)	127	105	85	85	54	103
500-174927-2 MS	2615V2-01-B31 (5-10)	125	106	91	86	66	99
500-174927-2 MSD	2615V2-01-B31 (5-10)	134	114	98	92	81	106
500-174927-3	2615V2-01-B31 (10-15)	130	105	80	82	39	103
500-174927-4	2615V2-01-B31 (15-23)	109	99	77	79	50	105
500-174927-5	2615V2-01-B31 (23-31)	139	112	91	90	59	114
500-174927-6	2615V2-01-B31 (31-39)	135	105	97	92	61	106
500-174927-7	2615V2-01-B31 (39-47)	141	120	98	91	75	119
500-174927-8	2615V2-01-B28 (0-5)	121	95	75	74	53	92
500-174927-9	2615V2-01-B28 (5-10)	133	115	100	106	71	131
500-174927-10	2615V2-01-B28 (10-15)	146	117	107	102	82	120
500-174927-11	2615V2-01-B28 (15-23)	147	117	96	93	81	125
500-174927-12	2615V2-01-B28 (23-31)	156	130	104	99	86	134
500-174927-13	2615V2-01-B28 (31-39)	142	124	101	117	76	158 X

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174927-14	2615V2-01-B28 (39-47)	126	101	89	99	52	128
LCS 500-521605/2-A	Lab Control Sample	133	115	95	100	75	99
MB 500-521605/1-A	Method Blank	166	130	102	98	61	126

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521704/6
Matrix: Solid
Analysis Batch: 521704

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/20/19 11:27	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/20/19 11:27	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/20/19 11:27	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/20/19 11:27	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/20/19 11:27	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/20/19 11:27	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/20/19 11:27	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/20/19 11:27	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/20/19 11:27	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/20/19 11:27	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/20/19 11:27	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/20/19 11:27	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/20/19 11:27	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/20/19 11:27	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/20/19 11:27	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/20/19 11:27	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/20/19 11:27	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/20/19 11:27	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/20/19 11:27	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/20/19 11:27	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/20/19 11:27	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/20/19 11:27	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/20/19 11:27	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/20/19 11:27	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/20/19 11:27	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/20/19 11:27	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/20/19 11:27	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/20/19 11:27	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/20/19 11:27	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/20/19 11:27	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/20/19 11:27	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/20/19 11:27	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/20/19 11:27	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/20/19 11:27	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/20/19 11:27	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/20/19 11:27	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/20/19 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134		12/20/19 11:27	1
4-Bromofluorobenzene (Surr)	95		75 - 131		12/20/19 11:27	1
Dibromofluoromethane	88		75 - 126		12/20/19 11:27	1
Toluene-d8 (Surr)	87		75 - 124		12/20/19 11:27	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521704/4
Matrix: Solid
Analysis Batch: 521704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0428		mg/Kg		86	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0417		mg/Kg		83	70 - 122
1,1,2-Trichloroethane	0.0500	0.0448		mg/Kg		90	70 - 125
1,1-Dichloroethane	0.0500	0.0476		mg/Kg		95	70 - 125
1,1-Dichloroethene	0.0500	0.0456		mg/Kg		91	70 - 120
1,2-Dichloroethane	0.0500	0.0453		mg/Kg		91	70 - 130
1,2-Dichloropropane	0.0500	0.0490		mg/Kg		98	70 - 125
2-Butanone (MEK)	0.0500	0.0478		mg/Kg		96	47 - 138
2-Hexanone	0.0500	0.0472		mg/Kg		94	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0466		mg/Kg		93	50 - 148
Acetone	0.0500	0.0529		mg/Kg		106	40 - 150
Benzene	0.0500	0.0463		mg/Kg		93	70 - 125
Bromodichloromethane	0.0500	0.0409		mg/Kg		82	67 - 129
Bromoform	0.0500	0.0357		mg/Kg		71	68 - 136
Bromomethane	0.0500	0.0459		mg/Kg		92	70 - 130
Carbon disulfide	0.0500	0.0444		mg/Kg		89	70 - 129
Carbon tetrachloride	0.0500	0.0418		mg/Kg		84	75 - 125
Chlorobenzene	0.0500	0.0471		mg/Kg		94	50 - 150
Chloroethane	0.0500	0.0584		mg/Kg		117	75 - 125
Chloroform	0.0500	0.0417		mg/Kg		83	57 - 135
Chloromethane	0.0500	0.0503		mg/Kg		101	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0444		mg/Kg		89	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0445		mg/Kg		89	70 - 125
Dibromochloromethane	0.0500	0.0405		mg/Kg		81	69 - 125
Ethylbenzene	0.0500	0.0463		mg/Kg		93	61 - 136
Methyl tert-butyl ether	0.0500	0.0428		mg/Kg		86	50 - 140
Methylene Chloride	0.0500	0.0435		mg/Kg		87	70 - 126
Styrene	0.0500	0.0441		mg/Kg		88	70 - 125
Tetrachloroethene	0.0500	0.0473		mg/Kg		95	70 - 124
Toluene	0.0500	0.0471		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0449		mg/Kg		90	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0415		mg/Kg		83	70 - 125
Trichloroethene	0.0500	0.0476		mg/Kg		95	70 - 125
Vinyl acetate	0.0500	0.0360		mg/Kg		72	40 - 153
Vinyl chloride	0.0500	0.0486		mg/Kg		97	70 - 125
Xylenes, Total	0.100	0.0902		mg/Kg		90	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 134
4-Bromofluorobenzene (Surr)	91		75 - 131
Dibromofluoromethane	85		75 - 126
Toluene-d8 (Surr)	96		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-521704/30

Matrix: Solid

Analysis Batch: 521704

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0444		mg/Kg		89	70 - 128	4	30
1,1,2,2-Tetrachloroethane	0.0500	0.0416		mg/Kg		83	70 - 122	0	30
1,1,2-Trichloroethane	0.0500	0.0411		mg/Kg		82	70 - 125	9	30
1,1-Dichloroethane	0.0500	0.0524		mg/Kg		105	70 - 125	10	30
1,1-Dichloroethene	0.0500	0.0501		mg/Kg		100	70 - 120	9	30
1,2-Dichloroethane	0.0500	0.0492		mg/Kg		98	70 - 130	8	30
1,2-Dichloropropane	0.0500	0.0535		mg/Kg		107	70 - 125	9	30
2-Butanone (MEK)	0.0500	0.0524		mg/Kg		105	47 - 138	9	30
2-Hexanone	0.0500	0.0473		mg/Kg		95	48 - 146	0	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0453		mg/Kg		91	50 - 148	3	30
Acetone	0.0500	0.0523		mg/Kg		105	40 - 150	1	30
Benzene	0.0500	0.0467		mg/Kg		93	70 - 125	1	30
Bromodichloromethane	0.0500	0.0442		mg/Kg		88	67 - 129	8	30
Bromoform	0.0500	0.0376		mg/Kg		75	68 - 136	5	30
Bromomethane	0.0500	0.0464		mg/Kg		93	70 - 130	1	30
Carbon disulfide	0.0500	0.0480		mg/Kg		96	70 - 129	8	30
Carbon tetrachloride	0.0500	0.0441		mg/Kg		88	75 - 125	6	30
Chlorobenzene	0.0500	0.0472		mg/Kg		94	50 - 150	0	30
Chloroethane	0.0500	0.0592		mg/Kg		118	75 - 125	1	30
Chloroform	0.0500	0.0431		mg/Kg		86	57 - 135	3	30
Chloromethane	0.0500	0.0486		mg/Kg		97	70 - 125	3	30
cis-1,2-Dichloroethene	0.0500	0.0479		mg/Kg		96	70 - 125	8	30
cis-1,3-Dichloropropene	0.0500	0.0424		mg/Kg		85	70 - 125	5	30
Dibromochloromethane	0.0500	0.0383		mg/Kg		77	69 - 125	6	30
Ethylbenzene	0.0500	0.0475		mg/Kg		95	61 - 136	3	30
Methyl tert-butyl ether	0.0500	0.0474		mg/Kg		95	50 - 140	10	30
Methylene Chloride	0.0500	0.0485		mg/Kg		97	70 - 126	11	30
Styrene	0.0500	0.0455		mg/Kg		91	70 - 125	3	30
Tetrachloroethene	0.0500	0.0437		mg/Kg		87	70 - 124	8	30
Toluene	0.0500	0.0433		mg/Kg		87	70 - 125	9	30
trans-1,2-Dichloroethene	0.0500	0.0488		mg/Kg		98	70 - 125	8	30
trans-1,3-Dichloropropene	0.0500	0.0393		mg/Kg		79	70 - 125	6	30
Trichloroethene	0.0500	0.0503		mg/Kg		101	70 - 125	5	30
Vinyl acetate	0.0500	0.0370		mg/Kg		74	40 - 153	3	30
Vinyl chloride	0.0500	0.0465		mg/Kg		93	70 - 125	4	30
Xylenes, Total	0.100	0.0923		mg/Kg		92	53 - 147	2	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	91		70 - 134
4-Bromofluorobenzene (Surr)	90		75 - 131
Dibromofluoromethane	88		75 - 126
Toluene-d8 (Surr)	90		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521750/6
Matrix: Solid
Analysis Batch: 521750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/20/19 13:59	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/20/19 13:59	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/20/19 13:59	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/20/19 13:59	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/20/19 13:59	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/20/19 13:59	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/20/19 13:59	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/20/19 13:59	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/20/19 13:59	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/20/19 13:59	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/20/19 13:59	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/20/19 13:59	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/20/19 13:59	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/20/19 13:59	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/20/19 13:59	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/20/19 13:59	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/20/19 13:59	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/20/19 13:59	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/20/19 13:59	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/20/19 13:59	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/20/19 13:59	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/20/19 13:59	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/20/19 13:59	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/20/19 13:59	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/20/19 13:59	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/20/19 13:59	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/20/19 13:59	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/20/19 13:59	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/20/19 13:59	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/20/19 13:59	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/20/19 13:59	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/20/19 13:59	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/20/19 13:59	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/20/19 13:59	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/20/19 13:59	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/20/19 13:59	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/20/19 13:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134		12/20/19 13:59	1
4-Bromofluorobenzene (Surr)	93		75 - 131		12/20/19 13:59	1
Dibromofluoromethane	97		75 - 126		12/20/19 13:59	1
Toluene-d8 (Surr)	89		75 - 124		12/20/19 13:59	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521750/29

Matrix: Solid

Analysis Batch: 521750

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0512		mg/Kg		102	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0385		mg/Kg		77	70 - 122
1,1,2-Trichloroethane	0.0500	0.0443		mg/Kg		89	70 - 125
1,1-Dichloroethane	0.0500	0.0480		mg/Kg		96	70 - 125
1,1-Dichloroethene	0.0500	0.0490		mg/Kg		98	70 - 120
1,2-Dichloroethane	0.0500	0.0494		mg/Kg		99	70 - 130
1,2-Dichloropropane	0.0500	0.0477		mg/Kg		95	70 - 125
2-Butanone (MEK)	0.0500	0.0336		mg/Kg		67	47 - 138
2-Hexanone	0.0500	0.0320		mg/Kg		64	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0320		mg/Kg		64	50 - 148
Acetone	0.0500	0.0373		mg/Kg		75	40 - 150
Benzene	0.0500	0.0509		mg/Kg		102	70 - 125
Bromodichloromethane	0.0500	0.0510		mg/Kg		102	67 - 129
Bromoform	0.0500	0.0441		mg/Kg		88	68 - 136
Bromomethane	0.0500	0.0824	*	mg/Kg		165	70 - 130
Carbon disulfide	0.0500	0.0481		mg/Kg		96	70 - 129
Carbon tetrachloride	0.0500	0.0510		mg/Kg		102	75 - 125
Chlorobenzene	0.0500	0.0475		mg/Kg		95	50 - 150
Chloroethane	0.0500	0.0856	*	mg/Kg		171	75 - 125
Chloroform	0.0500	0.0504		mg/Kg		101	57 - 135
Chloromethane	0.0500	0.0459		mg/Kg		92	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0510		mg/Kg		102	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0423		mg/Kg		85	70 - 125
Dibromochloromethane	0.0500	0.0464		mg/Kg		93	69 - 125
Ethylbenzene	0.0500	0.0471		mg/Kg		94	61 - 136
Methyl tert-butyl ether	0.0500	0.0484		mg/Kg		97	50 - 140
Methylene Chloride	0.0500	0.0481		mg/Kg		96	70 - 126
Styrene	0.0500	0.0492		mg/Kg		98	70 - 125
Tetrachloroethene	0.0500	0.0502		mg/Kg		100	70 - 124
Toluene	0.0500	0.0468		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0518		mg/Kg		104	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0408		mg/Kg		82	70 - 125
Trichloroethene	0.0500	0.0571		mg/Kg		114	70 - 125
Vinyl acetate	0.0500	0.0300		mg/Kg		60	40 - 153
Vinyl chloride	0.0500	0.0442		mg/Kg		88	70 - 125
Xylenes, Total	0.100	0.0951		mg/Kg		95	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 134
4-Bromofluorobenzene (Surr)	81		75 - 131
Dibromofluoromethane	96		75 - 126
Toluene-d8 (Surr)	89		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521852/6
Matrix: Solid
Analysis Batch: 521852

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/21/19 08:34	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/21/19 08:34	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/21/19 08:34	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/21/19 08:34	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/21/19 08:34	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/21/19 08:34	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/21/19 08:34	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/21/19 08:34	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/21/19 08:34	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/21/19 08:34	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/21/19 08:34	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/21/19 08:34	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/21/19 08:34	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/21/19 08:34	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/21/19 08:34	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/21/19 08:34	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/21/19 08:34	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/21/19 08:34	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/21/19 08:34	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/21/19 08:34	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/21/19 08:34	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/21/19 08:34	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/21/19 08:34	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/21/19 08:34	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/21/19 08:34	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/21/19 08:34	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/21/19 08:34	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/21/19 08:34	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/21/19 08:34	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/21/19 08:34	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/21/19 08:34	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/21/19 08:34	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/21/19 08:34	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/21/19 08:34	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/21/19 08:34	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/21/19 08:34	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/21/19 08:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134		12/21/19 08:34	1
4-Bromofluorobenzene (Surr)	97		75 - 131		12/21/19 08:34	1
Dibromofluoromethane	82		75 - 126		12/21/19 08:34	1
Toluene-d8 (Surr)	96		75 - 124		12/21/19 08:34	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521852/4

Matrix: Solid

Analysis Batch: 521852

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0383		mg/Kg		77	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0455		mg/Kg		91	70 - 122
1,1,2-Trichloroethane	0.0500	0.0467		mg/Kg		93	70 - 125
1,1-Dichloroethane	0.0500	0.0453		mg/Kg		91	70 - 125
1,1-Dichloroethene	0.0500	0.0419		mg/Kg		84	70 - 120
1,2-Dichloroethane	0.0500	0.0441		mg/Kg		88	70 - 130
1,2-Dichloropropane	0.0500	0.0476		mg/Kg		95	70 - 125
2-Butanone (MEK)	0.0500	0.0495		mg/Kg		99	47 - 138
2-Hexanone	0.0500	0.0551		mg/Kg		110	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0520		mg/Kg		104	50 - 148
Acetone	0.0500	0.0556		mg/Kg		111	40 - 150
Benzene	0.0500	0.0438		mg/Kg		88	70 - 125
Bromodichloromethane	0.0500	0.0399		mg/Kg		80	67 - 129
Bromoform	0.0500	0.0343		mg/Kg		69	68 - 136
Bromomethane	0.0500	0.0376		mg/Kg		75	70 - 130
Carbon disulfide	0.0500	0.0412		mg/Kg		82	70 - 129
Carbon tetrachloride	0.0500	0.0379		mg/Kg		76	75 - 125
Chlorobenzene	0.0500	0.0462		mg/Kg		92	50 - 150
Chloroethane	0.0500	0.0402		mg/Kg		80	75 - 125
Chloroform	0.0500	0.0371		mg/Kg		74	57 - 135
Chloromethane	0.0500	0.0437		mg/Kg		87	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0380		mg/Kg		76	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0448		mg/Kg		90	70 - 125
Dibromochloromethane	0.0500	0.0406		mg/Kg		81	69 - 125
Ethylbenzene	0.0500	0.0456		mg/Kg		91	61 - 136
Methyl tert-butyl ether	0.0500	0.0425		mg/Kg		85	50 - 140
Methylene Chloride	0.0500	0.0415		mg/Kg		83	70 - 126
Styrene	0.0500	0.0446		mg/Kg		89	70 - 125
Tetrachloroethene	0.0500	0.0445		mg/Kg		89	70 - 124
Toluene	0.0500	0.0466		mg/Kg		93	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0413		mg/Kg		83	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0436		mg/Kg		87	70 - 125
Trichloroethene	0.0500	0.0430		mg/Kg		86	70 - 125
Vinyl acetate	0.0500	0.0491		mg/Kg		98	40 - 153
Vinyl chloride	0.0500	0.0421		mg/Kg		84	70 - 125
Xylenes, Total	0.100	0.0895		mg/Kg		90	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 134
4-Bromofluorobenzene (Surr)	93		75 - 131
Dibromofluoromethane	78		75 - 126
Toluene-d8 (Surr)	98		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-521852/7
Matrix: Solid
Analysis Batch: 521852

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0429		mg/Kg		86	70 - 128	11	30
1,1,2,2-Tetrachloroethane	0.0500	0.0491		mg/Kg		98	70 - 122	8	30
1,1,2-Trichloroethane	0.0500	0.0494		mg/Kg		99	70 - 125	6	30
1,1-Dichloroethane	0.0500	0.0490		mg/Kg		98	70 - 125	8	30
1,1-Dichloroethene	0.0500	0.0459		mg/Kg		92	70 - 120	9	30
1,2-Dichloroethane	0.0500	0.0476		mg/Kg		95	70 - 130	8	30
1,2-Dichloropropane	0.0500	0.0520		mg/Kg		104	70 - 125	9	30
2-Butanone (MEK)	0.0500	0.0566		mg/Kg		113	47 - 138	13	30
2-Hexanone	0.0500	0.0582		mg/Kg		116	48 - 146	6	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0557		mg/Kg		111	50 - 148	7	30
Acetone	0.0500	0.0591		mg/Kg		118	40 - 150	6	30
Benzene	0.0500	0.0475		mg/Kg		95	70 - 125	8	30
Bromodichloromethane	0.0500	0.0423		mg/Kg		85	67 - 129	6	30
Bromoform	0.0500	0.0392		mg/Kg		78	68 - 136	13	30
Bromomethane	0.0500	0.0418		mg/Kg		84	70 - 130	11	30
Carbon disulfide	0.0500	0.0449		mg/Kg		90	70 - 129	8	30
Carbon tetrachloride	0.0500	0.0416		mg/Kg		83	75 - 125	9	30
Chlorobenzene	0.0500	0.0489		mg/Kg		98	50 - 150	6	30
Chloroethane	0.0500	0.0495		mg/Kg		99	75 - 125	21	30
Chloroform	0.0500	0.0424		mg/Kg		85	57 - 135	13	30
Chloromethane	0.0500	0.0452		mg/Kg		90	70 - 125	3	30
cis-1,2-Dichloroethene	0.0500	0.0449		mg/Kg		90	70 - 125	17	30
cis-1,3-Dichloropropene	0.0500	0.0471		mg/Kg		94	70 - 125	5	30
Dibromochloromethane	0.0500	0.0430		mg/Kg		86	69 - 125	6	30
Ethylbenzene	0.0500	0.0488		mg/Kg		98	61 - 136	7	30
Methyl tert-butyl ether	0.0500	0.0460		mg/Kg		92	50 - 140	8	30
Methylene Chloride	0.0500	0.0444		mg/Kg		89	70 - 126	7	30
Styrene	0.0500	0.0470		mg/Kg		94	70 - 125	5	30
Tetrachloroethene	0.0500	0.0478		mg/Kg		96	70 - 124	7	30
Toluene	0.0500	0.0499		mg/Kg		100	70 - 125	7	30
trans-1,2-Dichloroethene	0.0500	0.0451		mg/Kg		90	70 - 125	9	30
trans-1,3-Dichloropropene	0.0500	0.0463		mg/Kg		93	70 - 125	6	30
Trichloroethene	0.0500	0.0470		mg/Kg		94	70 - 125	9	30
Vinyl acetate	0.0500	0.0453		mg/Kg		91	40 - 153	8	30
Vinyl chloride	0.0500	0.0443		mg/Kg		89	70 - 125	5	30
Xylenes, Total	0.100	0.0952		mg/Kg		95	53 - 147	6	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	88		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	83		75 - 126
Toluene-d8 (Surr)	98		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521605/1-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521605

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/19/19 17:08	12/23/19 15:20	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521605/1-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/19/19 17:08	12/23/19 15:20	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/19/19 17:08	12/23/19 15:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	166		31 - 166	12/19/19 17:08	12/23/19 15:20	1
Phenol-d5	130		30 - 153	12/19/19 17:08	12/23/19 15:20	1
Nitrobenzene-d5	102		37 - 147	12/19/19 17:08	12/23/19 15:20	1
2-Fluorobiphenyl	98		43 - 145	12/19/19 17:08	12/23/19 15:20	1
2,4,6-Tribromophenol	61		31 - 143	12/19/19 17:08	12/23/19 15:20	1
Terphenyl-d14	126		42 - 157	12/19/19 17:08	12/23/19 15:20	1

Lab Sample ID: LCS 500-521605/2-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.63		mg/Kg		122	56 - 122
Bis(2-chloroethyl)ether	1.33	1.34		mg/Kg		100	55 - 111
1,3-Dichlorobenzene	1.33	1.15		mg/Kg		87	65 - 124
1,4-Dichlorobenzene	1.33	1.18		mg/Kg		89	61 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		89	62 - 110
2-Methylphenol	1.33	1.45		mg/Kg		108	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.19		mg/Kg		89	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.53		mg/Kg		115	56 - 118
Hexachloroethane	1.33	1.09		mg/Kg		82	60 - 114
2-Chlorophenol	1.33	1.24		mg/Kg		93	64 - 110
Nitrobenzene	1.33	1.55		mg/Kg		116	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.41		mg/Kg		105	60 - 112
1,2,4-Trichlorobenzene	1.33	1.27		mg/Kg		95	66 - 117
Isophorone	1.33	1.40		mg/Kg		105	55 - 110
2,4-Dimethylphenol	1.33	1.18		mg/Kg		89	60 - 110
Hexachlorobutadiene	1.33	1.28		mg/Kg		96	56 - 120
Naphthalene	1.33	1.25		mg/Kg		94	63 - 110
2,4-Dichlorophenol	1.33	1.22		mg/Kg		92	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521605/2-A

Matrix: Solid

Analysis Batch: 522137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 521605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	0.676		mg/Kg		51	30 - 150
2,4,6-Trichlorophenol	1.33	1.09		mg/Kg		82	57 - 120
2,4,5-Trichlorophenol	1.33	0.971		mg/Kg		73	50 - 120
Hexachlorocyclopentadiene	1.33	0.962		mg/Kg		72	10 - 133
2-Methylnaphthalene	1.33	1.28		mg/Kg		96	69 - 112
2-Nitroaniline	1.33	1.35		mg/Kg		101	57 - 124
2-Chloronaphthalene	1.33	1.26		mg/Kg		95	69 - 114
4-Chloro-3-methylphenol	1.33	1.00		mg/Kg		75	65 - 122
2,6-Dinitrotoluene	1.33	1.25		mg/Kg		94	70 - 123
2-Nitrophenol	1.33	1.21		mg/Kg		90	60 - 120
3-Nitroaniline	1.33	0.700		mg/Kg		53	40 - 122
Dimethyl phthalate	1.33	1.21		mg/Kg		91	69 - 116
2,4-Dinitrophenol	2.67	<0.67		mg/Kg		10	10 - 100
Acenaphthylene	1.33	1.28		mg/Kg		96	68 - 120
2,4-Dinitrotoluene	1.33	1.28		mg/Kg		96	69 - 124
Acenaphthene	1.33	1.28		mg/Kg		96	65 - 124
Dibenzofuran	1.33	1.32		mg/Kg		99	66 - 115
4-Nitrophenol	2.67	1.32		mg/Kg		50	30 - 122
Fluorene	1.33	1.30		mg/Kg		97	62 - 120
4-Nitroaniline	1.33	0.851		mg/Kg		64	60 - 160
4-Bromophenyl phenyl ether	1.33	1.33		mg/Kg		99	68 - 118
Hexachlorobenzene	1.33	1.37		mg/Kg		103	63 - 124
Diethyl phthalate	1.33	1.36		mg/Kg		102	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.25		mg/Kg		94	62 - 119
Pentachlorophenol	2.67	0.575	J	mg/Kg		22	13 - 112
N-Nitrosodiphenylamine	1.33	1.35		mg/Kg		102	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.781		mg/Kg		29	10 - 110
Phenanthrene	1.33	1.36		mg/Kg		102	62 - 120
Anthracene	1.33	1.38		mg/Kg		103	70 - 114
Carbazole	1.33	1.45		mg/Kg		109	65 - 142
Di-n-butyl phthalate	1.33	1.25		mg/Kg		94	65 - 120
Fluoranthene	1.33	1.37		mg/Kg		103	62 - 120
Pyrene	1.33	1.23		mg/Kg		92	61 - 128
Butyl benzyl phthalate	1.33	1.15		mg/Kg		86	71 - 129
Benzo[a]anthracene	1.33	1.31		mg/Kg		99	67 - 122
Chrysene	1.33	1.23		mg/Kg		92	63 - 120
3,3'-Dichlorobenzidine	1.33	0.953		mg/Kg		71	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.19		mg/Kg		90	72 - 131
Di-n-octyl phthalate	1.33	1.24		mg/Kg		93	68 - 134
Benzo[b]fluoranthene	1.33	1.32		mg/Kg		99	69 - 129
Benzo[k]fluoranthene	1.33	1.40		mg/Kg		105	68 - 127
Benzo[a]pyrene	1.33	1.34		mg/Kg		101	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.52		mg/Kg		114	68 - 130
Dibenz(a,h)anthracene	1.33	1.58		mg/Kg		118	64 - 131
Benzo[g,h,i]perylene	1.33	1.57		mg/Kg		118	72 - 131
3 & 4 Methylphenol	1.33	1.20		mg/Kg		90	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521605/2-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521605

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	133		31 - 166
Phenol-d5	115		30 - 153
Nitrobenzene-d5	95		37 - 147
2-Fluorobiphenyl	100		43 - 145
2,4,6-Tribromophenol	75		31 - 143
Terphenyl-d14	99		42 - 157

Lab Sample ID: 500-174927-2 MS
Matrix: Solid
Analysis Batch: 522447

Client Sample ID: 2615V2-01-B31 (5-10)
Prep Type: Total/NA
Prep Batch: 521605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Phenol	<0.21	F1	1.62	1.93		mg/Kg	☼	119	56 - 122
Bis(2-chloroethyl)ether	<0.21		1.62	1.48		mg/Kg	☼	91	55 - 111
1,3-Dichlorobenzene	<0.21		1.62	1.39		mg/Kg	☼	86	60 - 110
1,4-Dichlorobenzene	<0.21		1.62	1.38		mg/Kg	☼	85	61 - 110
1,2-Dichlorobenzene	<0.21		1.62	1.43		mg/Kg	☼	88	62 - 110
2-Methylphenol	<0.21		1.62	1.95		mg/Kg	☼	120	60 - 120
2,2'-oxybis[1-chloropropane]	<0.21		1.62	1.37		mg/Kg	☼	84	40 - 124
N-Nitrosodi-n-propylamine	<0.082		1.62	1.79		mg/Kg	☼	110	56 - 118
Hexachloroethane	<0.21	F1	1.62	0.915	F1	mg/Kg	☼	56	60 - 114
2-Chlorophenol	<0.21		1.62	1.65		mg/Kg	☼	102	64 - 110
Nitrobenzene	<0.041		1.62	1.69		mg/Kg	☼	104	60 - 116
Bis(2-chloroethoxy)methane	<0.21		1.62	1.57		mg/Kg	☼	97	60 - 112
1,2,4-Trichlorobenzene	<0.21		1.62	1.49		mg/Kg	☼	92	66 - 117
Isophorone	<0.21		1.62	1.61		mg/Kg	☼	99	55 - 110
2,4-Dimethylphenol	<0.41	F1	1.62	1.78		mg/Kg	☼	110	60 - 110
Hexachlorobutadiene	<0.21		1.62	1.49		mg/Kg	☼	92	56 - 120
Naphthalene	0.024	J	1.62	1.56		mg/Kg	☼	95	63 - 110
2,4-Dichlorophenol	<0.41		1.62	1.56		mg/Kg	☼	96	58 - 120
4-Chloroaniline	<0.82		1.62	1.17		mg/Kg	☼	72	30 - 150
2,4,6-Trichlorophenol	<0.41		1.62	1.32		mg/Kg	☼	81	57 - 120
2,4,5-Trichlorophenol	<0.41		1.62	1.23		mg/Kg	☼	76	50 - 120
Hexachlorocyclopentadiene	<0.82	F1	1.62	<0.82	F1	mg/Kg	☼	0	10 - 133
2-Methylnaphthalene	0.059	J	1.62	1.60		mg/Kg	☼	95	69 - 112
2-Nitroaniline	<0.21		1.62	1.77		mg/Kg	☼	109	57 - 124
2-Chloronaphthalene	<0.21		1.62	1.58		mg/Kg	☼	97	69 - 114
4-Chloro-3-methylphenol	<0.41		1.62	1.76		mg/Kg	☼	108	65 - 122
2,6-Dinitrotoluene	<0.21		1.62	1.67		mg/Kg	☼	103	70 - 123
2-Nitrophenol	<0.41		1.62	1.55		mg/Kg	☼	96	60 - 120
3-Nitroaniline	<0.41		1.62	1.52		mg/Kg	☼	94	40 - 122
Dimethyl phthalate	<0.21		1.62	1.63		mg/Kg	☼	100	69 - 116
2,4-Dinitrophenol	<0.82	F1	3.24	<0.82	F1	mg/Kg	☼	0	10 - 100
Acenaphthylene	<0.041		1.62	1.60		mg/Kg	☼	98	68 - 120
2,4-Dinitrotoluene	<0.21		1.62	1.72		mg/Kg	☼	106	69 - 124
Acenaphthene	<0.041		1.62	1.58		mg/Kg	☼	97	65 - 124
Dibenzofuran	<0.21		1.62	1.64		mg/Kg	☼	101	66 - 115
4-Nitrophenol	<0.82	F1	3.24	3.81		mg/Kg	☼	117	30 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174927-2 MS

Matrix: Solid

Analysis Batch: 522447

Client Sample ID: 2615V2-01-B31 (5-10)

Prep Type: Total/NA

Prep Batch: 521605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	0.0071	J	1.62	1.63		mg/Kg	☼	100	62 - 120
4-Nitroaniline	<0.41		1.62	1.64		mg/Kg	☼	101	60 - 160
4-Bromophenyl phenyl ether	<0.21		1.62	1.67		mg/Kg	☼	103	68 - 118
Hexachlorobenzene	<0.082		1.62	1.74		mg/Kg	☼	107	63 - 124
Diethyl phthalate	<0.21		1.62	1.72		mg/Kg	☼	106	58 - 120
4-Chlorophenyl phenyl ether	<0.21		1.62	1.66		mg/Kg	☼	103	62 - 119
Pentachlorophenol	<0.82		3.24	1.14		mg/Kg	☼	35	13 - 112
N-Nitrosodiphenylamine	<0.21		1.62	1.78		mg/Kg	☼	110	65 - 112
4,6-Dinitro-2-methylphenol	<0.82	F2	3.24	0.888		mg/Kg	☼	27	10 - 110
Phenanthrene	0.10		1.62	1.75		mg/Kg	☼	102	62 - 120
Anthracene	<0.041		1.62	1.63		mg/Kg	☼	100	70 - 114
Carbazole	<0.21		1.62	1.83		mg/Kg	☼	113	65 - 142
Di-n-butyl phthalate	<0.21		1.62	1.75		mg/Kg	☼	108	65 - 120
Fluoranthene	<0.041		1.62	1.69		mg/Kg	☼	104	62 - 120
Pyrene	0.022	J	1.62	1.69		mg/Kg	☼	103	61 - 128
Butyl benzyl phthalate	<0.21		1.62	1.71		mg/Kg	☼	105	71 - 129
Benzo[a]anthracene	<0.041		1.62	1.73		mg/Kg	☼	107	67 - 122
Chrysene	<0.041		1.62	1.64		mg/Kg	☼	101	63 - 120
3,3'-Dichlorobenzidine	<0.21		1.62	1.29		mg/Kg	☼	80	35 - 128
Bis(2-ethylhexyl) phthalate	<0.21		1.62	1.73		mg/Kg	☼	106	72 - 131
Di-n-octyl phthalate	<0.21		1.62	1.78		mg/Kg	☼	109	68 - 134
Benzo[b]fluoranthene	<0.041		1.62	1.87		mg/Kg	☼	115	69 - 129
Benzo[k]fluoranthene	<0.041		1.62	1.83		mg/Kg	☼	113	68 - 127
Benzo[a]pyrene	<0.041		1.62	1.65		mg/Kg	☼	102	65 - 133
Indeno[1,2,3-cd]pyrene	<0.041	F1	1.62	1.09	F1	mg/Kg	☼	67	68 - 130
Dibenz(a,h)anthracene	<0.041		1.62	1.20		mg/Kg	☼	74	64 - 131
Benzo[g,h,i]perylene	<0.041	F1	1.62	0.970	F1	mg/Kg	☼	60	72 - 131
3 & 4 Methylphenol	<0.21	F1	1.62	1.86		mg/Kg	☼	115	57 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol	125		31 - 166
Phenol-d5	106		30 - 153
Nitrobenzene-d5	91		37 - 147
2-Fluorobiphenyl	86		43 - 145
2,4,6-Tribromophenol	66		31 - 143
Terphenyl-d14	99		42 - 157

Lab Sample ID: 500-174927-2 MSD

Matrix: Solid

Analysis Batch: 522447

Client Sample ID: 2615V2-01-B31 (5-10)

Prep Type: Total/NA

Prep Batch: 521605

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenol	<0.21	F1	1.62	2.28	F1	mg/Kg	☼	141	56 - 122	17	30
Bis(2-chloroethyl)ether	<0.21		1.62	1.60		mg/Kg	☼	99	55 - 111	8	30
1,3-Dichlorobenzene	<0.21		1.62	1.50		mg/Kg	☼	92	60 - 110	7	30
1,4-Dichlorobenzene	<0.21		1.62	1.49		mg/Kg	☼	92	61 - 110	8	30
1,2-Dichlorobenzene	<0.21		1.62	1.53		mg/Kg	☼	95	62 - 110	7	30
2-Methylphenol	<0.21		1.62	1.83		mg/Kg	☼	113	60 - 120	6	30

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174927-2 MSD

Matrix: Solid

Analysis Batch: 522447

Client Sample ID: 2615V2-01-B31 (5-10)

Prep Type: Total/NA

Prep Batch: 521605

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result			Result	Qualifier				Limits		Limit
2,2'-oxybis[1-chloropropane]	<0.21		1.62	1.47		mg/Kg	☼	91	40 - 124	7	30
N-Nitrosodi-n-propylamine	<0.082		1.62	1.78		mg/Kg	☼	110	56 - 118	0	30
Hexachloroethane	<0.21	F1	1.62	0.989		mg/Kg	☼	61	60 - 114	8	30
2-Chlorophenol	<0.21		1.62	1.78		mg/Kg	☼	110	64 - 110	8	30
Nitrobenzene	<0.041		1.62	1.79		mg/Kg	☼	111	60 - 116	6	30
Bis(2-chloroethoxy)methane	<0.21		1.62	1.63		mg/Kg	☼	101	60 - 112	4	30
1,2,4-Trichlorobenzene	<0.21		1.62	1.62		mg/Kg	☼	100	66 - 117	8	30
Isophorone	<0.21		1.62	1.67		mg/Kg	☼	103	55 - 110	4	30
2,4-Dimethylphenol	<0.41	F1	1.62	1.89	F1	mg/Kg	☼	117	60 - 110	6	30
Hexachlorobutadiene	<0.21		1.62	1.67		mg/Kg	☼	103	56 - 120	11	30
Naphthalene	0.024	J	1.62	1.65		mg/Kg	☼	101	63 - 110	6	30
2,4-Dichlorophenol	<0.41		1.62	1.74		mg/Kg	☼	107	58 - 120	11	30
4-Chloroaniline	<0.82		1.62	1.32		mg/Kg	☼	82	30 - 150	13	30
2,4,6-Trichlorophenol	<0.41		1.62	1.51		mg/Kg	☼	93	57 - 120	13	30
2,4,5-Trichlorophenol	<0.41		1.62	1.41		mg/Kg	☼	87	50 - 120	14	30
Hexachlorocyclopentadiene	<0.82	F1	1.62	<0.81	F1	mg/Kg	☼	0	10 - 133	NC	30
2-Methylnaphthalene	0.059	J	1.62	1.72		mg/Kg	☼	102	69 - 112	7	30
2-Nitroaniline	<0.21		1.62	1.83		mg/Kg	☼	113	57 - 124	4	30
2-Chloronaphthalene	<0.21		1.62	1.68		mg/Kg	☼	104	69 - 114	6	30
4-Chloro-3-methylphenol	<0.41		1.62	1.86		mg/Kg	☼	115	65 - 122	6	30
2,6-Dinitrotoluene	<0.21		1.62	1.76		mg/Kg	☼	109	70 - 123	5	30
2-Nitrophenol	<0.41		1.62	1.63		mg/Kg	☼	101	60 - 120	5	30
3-Nitroaniline	<0.41		1.62	1.58		mg/Kg	☼	97	40 - 122	4	30
Dimethyl phthalate	<0.21		1.62	1.73		mg/Kg	☼	107	69 - 116	6	30
2,4-Dinitrophenol	<0.82	F1	3.24	<0.81	F1	mg/Kg	☼	0	10 - 100	NC	30
Acenaphthylene	<0.041		1.62	1.71		mg/Kg	☼	106	68 - 120	7	30
2,4-Dinitrotoluene	<0.21		1.62	1.80		mg/Kg	☼	111	69 - 124	4	30
Acenaphthene	<0.041		1.62	1.71		mg/Kg	☼	105	65 - 124	8	30
Dibenzofuran	<0.21		1.62	1.73		mg/Kg	☼	107	66 - 115	6	30
4-Nitrophenol	<0.82	F1	3.24	4.08	F1	mg/Kg	☼	126	30 - 122	7	30
Fluorene	0.0071	J	1.62	1.72		mg/Kg	☼	106	62 - 120	5	30
4-Nitroaniline	<0.41		1.62	1.70		mg/Kg	☼	105	60 - 160	4	30
4-Bromophenyl phenyl ether	<0.21		1.62	1.74		mg/Kg	☼	108	68 - 118	5	30
Hexachlorobenzene	<0.082		1.62	1.83		mg/Kg	☼	113	63 - 124	5	30
Diethyl phthalate	<0.21		1.62	1.81		mg/Kg	☼	111	58 - 120	5	30
4-Chlorophenyl phenyl ether	<0.21		1.62	1.75		mg/Kg	☼	108	62 - 119	5	30
Pentachlorophenol	<0.82		3.24	1.04		mg/Kg	☼	32	13 - 112	9	30
N-Nitrosodiphenylamine	<0.21		1.62	1.82		mg/Kg	☼	112	65 - 112	2	30
4,6-Dinitro-2-methylphenol	<0.82	F2	3.24	0.649	J F2	mg/Kg	☼	20	10 - 110	31	30
Phenanthrene	0.10		1.62	1.81		mg/Kg	☼	105	62 - 120	3	30
Anthracene	<0.041		1.62	1.73		mg/Kg	☼	107	70 - 114	6	30
Carbazole	<0.21		1.62	1.91		mg/Kg	☼	118	65 - 142	4	30
Di-n-butyl phthalate	<0.21		1.62	1.83		mg/Kg	☼	113	65 - 120	4	30
Fluoranthene	<0.041		1.62	1.76		mg/Kg	☼	109	62 - 120	4	30
Pyrene	0.022	J	1.62	1.80		mg/Kg	☼	110	61 - 128	6	30
Butyl benzyl phthalate	<0.21		1.62	1.82		mg/Kg	☼	113	71 - 129	6	30
Benzo[a]anthracene	<0.041		1.62	1.82		mg/Kg	☼	112	67 - 122	5	30
Chrysene	<0.041		1.62	1.71		mg/Kg	☼	106	63 - 120	5	30
3,3'-Dichlorobenzidine	<0.21		1.62	1.47		mg/Kg	☼	91	35 - 128	13	30

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-174927-2 MSD

Matrix: Solid

Analysis Batch: 522447

Client Sample ID: 2615V2-01-B31 (5-10)

Prep Type: Total/NA

Prep Batch: 521605

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Bis(2-ethylhexyl) phthalate	<0.21		1.62	1.83		mg/Kg	☼	113	72 - 131	6	30	
Di-n-octyl phthalate	<0.21		1.62	1.87		mg/Kg	☼	116	68 - 134	5	30	
Benzo[b]fluoranthene	<0.041		1.62	1.97		mg/Kg	☼	122	69 - 129	5	30	
Benzo[k]fluoranthene	<0.041		1.62	1.87		mg/Kg	☼	115	68 - 127	2	30	
Benzo[a]pyrene	<0.041		1.62	1.77		mg/Kg	☼	109	65 - 133	7	30	
Indeno[1,2,3-cd]pyrene	<0.041	F1	1.62	1.16		mg/Kg	☼	71	68 - 130	6	30	
Dibenz(a,h)anthracene	<0.041		1.62	1.27		mg/Kg	☼	78	64 - 131	6	30	
Benzo[g,h,i]perylene	<0.041	F1	1.62	1.02	F1	mg/Kg	☼	63	72 - 131	5	30	
3 & 4 Methylphenol	<0.21	F1	1.62	1.95	F1	mg/Kg	☼	121	57 - 120	5	30	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol	134		31 - 166
Phenol-d5	114		30 - 153
Nitrobenzene-d5	98		37 - 147
2-Fluorobiphenyl	92		43 - 145
2,4,6-Tribromophenol	81		31 - 143
Terphenyl-d14	106		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-521134/1-A

Matrix: Solid

Analysis Batch: 521401

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 521134

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Barium	<1.0		1.0	0.11	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Boron	<5.0		5.0	0.47	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Cadmium	0.0514	J	0.20	0.036	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Calcium	4.53	J	20	3.4	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Copper	<1.0		1.0	0.28	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Iron	<20		20	10	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Lead	<0.50		0.50	0.23	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Magnesium	<10		10	5.0	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Potassium	<50		50	18	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Silver	<0.50		0.50	0.13	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Sodium	<100		100	15	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/17/19 17:17	12/18/19 19:10	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/17/19 17:17	12/18/19 19:10	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-521134/2-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521134
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Arsenic	10.0	8.94		mg/Kg		89	80 - 120
Barium	200	188		mg/Kg		94	80 - 120
Beryllium	5.00	4.47		mg/Kg		89	80 - 120
Boron	100	84.3		mg/Kg		84	80 - 120
Cadmium	5.00	4.58		mg/Kg		92	80 - 120
Calcium	1000	913		mg/Kg		91	80 - 120
Chromium	20.0	19.0		mg/Kg		95	80 - 120
Cobalt	50.0	47.4		mg/Kg		95	80 - 120
Copper	25.0	23.5		mg/Kg		94	80 - 120
Iron	100	106		mg/Kg		106	80 - 120
Lead	10.0	8.94		mg/Kg		89	80 - 120
Magnesium	1000	863		mg/Kg		86	80 - 120
Manganese	50.0	45.3		mg/Kg		91	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Potassium	1000	913		mg/Kg		91	80 - 120
Selenium	10.0	8.33		mg/Kg		83	80 - 120
Silver	5.00	4.51		mg/Kg		90	80 - 120
Sodium	1000	946		mg/Kg		95	80 - 120
Thallium	10.0	8.92		mg/Kg		89	80 - 120
Vanadium	50.0	47.5		mg/Kg		95	80 - 120
Zinc	50.0	45.8		mg/Kg		92	80 - 120

Lab Sample ID: MB 500-521387/1-A
Matrix: Solid
Analysis Batch: 521634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521387

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Barium	<1.0		1.0	0.11	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Boron	0.516	J	5.0	0.47	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Cadmium	0.0424	J	0.20	0.036	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Calcium	<20		20	3.4	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Copper	<1.0		1.0	0.28	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Iron	11.6	J	20	10	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Lead	<0.50		0.50	0.23	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Magnesium	<10		10	5.0	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Potassium	<50		50	18	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Silver	<0.50		0.50	0.13	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Sodium	<100		100	15	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/18/19 18:04	12/19/19 16:52	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-521387/1-A
Matrix: Solid
Analysis Batch: 521634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521387

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<2.0		2.0	0.88	mg/Kg		12/18/19 18:04	12/19/19 16:52	1

Lab Sample ID: LCS 500-521387/2-A
Matrix: Solid
Analysis Batch: 521634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.0	48.7		mg/Kg		97	80 - 120
Arsenic	10.0	9.47		mg/Kg		95	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	4.71		mg/Kg		94	80 - 120
Boron	100	88.0		mg/Kg		88	80 - 120
Cadmium	5.00	4.69		mg/Kg		94	80 - 120
Calcium	1000	934		mg/Kg		93	80 - 120
Chromium	20.0	18.9		mg/Kg		94	80 - 120
Cobalt	50.0	48.6		mg/Kg		97	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Iron	100	112		mg/Kg		112	80 - 120
Lead	10.0	9.22		mg/Kg		92	80 - 120
Magnesium	1000	901		mg/Kg		90	80 - 120
Manganese	50.0	47.4		mg/Kg		95	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Potassium	1000	944		mg/Kg		94	80 - 120
Selenium	10.0	8.57		mg/Kg		86	80 - 120
Silver	5.00	4.51		mg/Kg		90	80 - 120
Sodium	1000	972		mg/Kg		97	80 - 120
Thallium	10.0	9.46		mg/Kg		95	80 - 120
Vanadium	50.0	47.1		mg/Kg		94	80 - 120
Zinc	50.0	47.7		mg/Kg		95	80 - 120

Lab Sample ID: LCS 500-522549/2-A
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	0.100	0.101		mg/L		101	80 - 120
Manganese	0.500	0.503		mg/L		101	80 - 120
Nickel	0.500	0.505		mg/L		101	80 - 120

Lab Sample ID: LCS 500-522552/2-A
Matrix: Solid
Analysis Batch: 522718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.511		mg/L		102	80 - 120
Beryllium	0.0500	0.0529		mg/L		106	80 - 120
Boron	1.00	0.972		mg/L		97	80 - 120
Cadmium	0.0500	0.0553		mg/L		111	80 - 120
Chromium	0.200	0.207		mg/L		103	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-522552/2-A
Matrix: Solid
Analysis Batch: 522718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.500	0.555		mg/L		111	80 - 120
Iron	1.00	1.10		mg/L		110	80 - 120
Lead	0.100	0.103		mg/L		103	80 - 120
Manganese	0.500	0.509		mg/L		102	80 - 120
Nickel	0.500	0.552		mg/L		110	80 - 120
Selenium	0.100	0.109		mg/L		109	80 - 120
Silver	0.0500	0.0531		mg/L		106	80 - 120
Zinc	0.500	0.606	*	mg/L		121	80 - 120

Lab Sample ID: LB 500-522374/1-B
Matrix: Solid
Analysis Batch: 522718

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522552

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 09:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:19	12/27/19 09:10	1
Boron	<0.50		0.50	0.050	mg/L		12/26/19 15:19	12/27/19 09:10	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:19	12/27/19 09:10	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:10	1
Cobalt	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:10	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:19	12/27/19 09:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:19	12/27/19 09:10	1
Manganese	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:10	1
Nickel	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:10	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:19	12/27/19 09:10	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:19	12/27/19 09:10	1
Zinc	<0.50		0.50	0.020	mg/L		12/26/19 15:19	12/27/19 09:10	1

Lab Sample ID: 500-174927-13 MS
Matrix: Solid
Analysis Batch: 522718

Client Sample ID: 2615V2-01-B28 (31-39)
Prep Type: TCLP
Prep Batch: 522552

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.62		0.500	1.16		mg/L		108	75 - 125
Beryllium	<0.0040		0.0500	0.0531		mg/L		106	75 - 125
Boron	0.11	J	1.00	1.11		mg/L		100	75 - 125
Cadmium	<0.0050		0.0500	0.0588		mg/L		118	75 - 125
Chromium	<0.025		0.200	0.202		mg/L		101	75 - 125
Cobalt	0.016	J	0.500	0.574		mg/L		112	75 - 125
Iron	<0.40		1.00	1.07		mg/L		107	75 - 125
Lead	<0.0075		0.100	0.112		mg/L		112	75 - 125
Manganese	1.8		0.500	2.38		mg/L		110	75 - 125
Nickel	0.040		0.500	0.598		mg/L		112	75 - 125
Selenium	<0.050		0.100	0.120		mg/L		120	75 - 125
Silver	<0.025		0.0500	0.0578		mg/L		116	75 - 125
Zinc	0.029	J *	0.500	0.571		mg/L		108	75 - 125

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174927-13 DU
Matrix: Solid
Analysis Batch: 522718

Client Sample ID: 2615V2-01-B28 (31-39)
Prep Type: TCLP
Prep Batch: 522552

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Barium	0.62		0.625		mg/L		1	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.11	J	0.113	J	mg/L		0.9	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.016	J	0.0163	J	mg/L		0.4	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.8		1.83		mg/L		0	20
Nickel	0.040		0.0406		mg/L		1	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.029	J*	0.0285	J*	mg/L		0.7	20

Lab Sample ID: LB 500-522371/1-B
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 522549

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:14	12/28/19 00:05	1
Manganese	<0.025		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 00:05	1
Nickel	<0.025		0.025	0.010	mg/L		12/26/19 15:14	12/28/19 00:05	1

Lab Sample ID: 500-174927-14 MS
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: 2615V2-01-B28 (39-47)
Prep Type: SPLP East
Prep Batch: 522549

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Lead	<0.0075		0.100	0.108		mg/L		108	75 - 125
Manganese	0.072		0.500	0.586		mg/L		103	75 - 125
Nickel	<0.025		0.500	0.514		mg/L		103	75 - 125

Lab Sample ID: 500-174927-14 DU
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: 2615V2-01-B28 (39-47)
Prep Type: SPLP East
Prep Batch: 522549

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.072		0.0712		mg/L		1	20
Nickel	<0.025		<0.025		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-522552/2-A
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522552

Analyte	Spike	LCS LCS		Unit	D	%Rec	Limits
		Added	Result				
Antimony	0.500	0.519		mg/L		104	80 - 120
Thallium	0.100	0.102		mg/L		102	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LB 500-522374/1-B
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522552

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:19	12/27/19 11:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:19	12/27/19 11:20	1

Lab Sample ID: 500-174927-13 MS
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: 2615V2-01-B28 (31-39)
Prep Type: TCLP
Prep Batch: 522552

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0060		0.500	0.518		mg/L		104	75 - 125
Thallium	<0.0020		0.100	0.102		mg/L		102	75 - 125

Lab Sample ID: 500-174927-13 DU
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: 2615V2-01-B28 (31-39)
Prep Type: TCLP
Prep Batch: 522552

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-522701/12-A
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522701

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 09:28	1

Lab Sample ID: LCS 500-522701/15-A
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00219		mg/L		109	80 - 120

Lab Sample ID: LB 500-522374/1-C
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522701

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 09:31	1

Lab Sample ID: 500-174927-11 MS
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: 2615V2-01-B28 (15-23)
Prep Type: TCLP
Prep Batch: 522701

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00107		mg/L		107	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 500-174927-11 MSD
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: 2615V2-01-B28 (15-23)
Prep Type: TCLP
Prep Batch: 522701

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00111		mg/L		111	75 - 125	4	20

Lab Sample ID: 500-174927-11 DU
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: 2615V2-01-B28 (15-23)
Prep Type: TCLP
Prep Batch: 522701

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-521649/12-A
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521649

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/20/19 11:30	12/23/19 08:14	1

Lab Sample ID: LCS 500-521649/13-A
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.149		mg/Kg		89	80 - 120

Lab Sample ID: 500-174927-10 MS
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: 2615V2-01-B28 (10-15)
Prep Type: Total/NA
Prep Batch: 521649

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.019	J	0.0972	0.106		mg/Kg	☼	90	75 - 125

Lab Sample ID: 500-174927-10 MSD
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: 2615V2-01-B28 (10-15)
Prep Type: Total/NA
Prep Batch: 521649

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.019	J	0.0974	0.0964		mg/Kg	☼	80	75 - 125	9	20

Lab Sample ID: 500-174927-10 DU
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: 2615V2-01-B28 (10-15)
Prep Type: Total/NA
Prep Batch: 521649

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.019	J	0.0188	J	mg/Kg	☼	0.9	20

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Method: 9045D - pH

Lab Sample ID: 500-174927-14 DU
Matrix: Solid
Analysis Batch: 521159

Client Sample ID: 2615V2-01-B28 (39-47)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.7		7.7		SU		0.1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B31 (0-5)

Lab Sample ID: 500-174927-1

Date Collected: 12/11/19 11:50

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:13	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:18	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:24	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:45	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 09:51		
					(End)	12/18/19 09:55		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B31 (0-5)

Lab Sample ID: 500-174927-1

Date Collected: 12/11/19 11:50

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521704	12/20/19 19:09	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 19:34	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:06	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 18:38	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:18	MJG	TAL CHI

Client Sample ID: 2615V2-01-B31 (5-10)

Lab Sample ID: 500-174927-2

Date Collected: 12/11/19 11:55

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:18	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:22	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B31 (5-10)

Lab Sample ID: 500-174927-2

Date Collected: 12/11/19 11:55

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:26	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:47	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 09:55		
					(End)	12/18/19 10:00		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B31 (5-10)

Lab Sample ID: 500-174927-2

Date Collected: 12/11/19 11:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521704	12/20/19 19:35	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 14:40	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:11	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 18:42	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:20	MJG	TAL CHI

Client Sample ID: 2615V2-01-B31 (10-15)

Lab Sample ID: 500-174927-3

Date Collected: 12/11/19 12:00

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:22	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:27	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:28	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:48	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B31 (10-15)

Lab Sample ID: 500-174927-3

Date Collected: 12/11/19 12:00

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B31 (10-15)

Lab Sample ID: 500-174927-3

Date Collected: 12/11/19 12:00

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521704	12/20/19 20:00	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 17:35	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:15	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 18:58	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:27	MJG	TAL CHI

Client Sample ID: 2615V2-01-B31 (15-23)

Lab Sample ID: 500-174927-4

Date Collected: 12/11/19 12:10

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:26	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:31	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:30	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 10:08		
					(End)	12/18/19 10:13		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B31 (15-23)

Lab Sample ID: 500-174927-4

Date Collected: 12/11/19 12:10

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521704	12/20/19 20:26	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 18:05	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:19	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:02	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:29	MJG	TAL CHI

Client Sample ID: 2615V2-01-B31 (23-31)

Lab Sample ID: 500-174927-5

Date Collected: 12/11/19 12:20

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:30	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:35	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:32	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:51	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159	(Start) 12/18/19 10:13 (End) 12/18/19 10:17	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B31 (23-31)

Lab Sample ID: 500-174927-5

Date Collected: 12/11/19 12:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521704	12/20/19 20:51	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 18:35	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:23	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B31 (23-31)

Lab Sample ID: 500-174927-5

Date Collected: 12/11/19 12:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		5	521531	12/19/19 11:40	JEF	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		5	521646	12/19/19 19:07	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:31	MJG	TAL CHI

Client Sample ID: 2615V2-01-B31 (31-39)

Lab Sample ID: 500-174927-6

Date Collected: 12/11/19 12:30

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:34	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:40	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:35	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:53	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 10:17		
					(End)	12/18/19 10:21		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B31 (31-39)

Lab Sample ID: 500-174927-6

Date Collected: 12/11/19 12:30

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521750	12/20/19 21:59	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 15:09	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:27	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:11	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:33	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B31 (39-47)

Lab Sample ID: 500-174927-7

Date Collected: 12/11/19 12:40

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:38	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:44	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:37	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:54	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159	(Start) 12/18/19 10:21 (End) 12/18/19 10:26	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B31 (39-47)

Lab Sample ID: 500-174927-7

Date Collected: 12/11/19 12:40

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521750	12/20/19 22:24	PMF	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 17:06	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:31	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:15	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:35	MJG	TAL CHI

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:42	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 09:56	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:39	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:56	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 10:26		
					(End)	12/18/19 10:30		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (0-5)

Lab Sample ID: 500-174927-8

Date Collected: 12/11/19 13:45

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 09:25	STW	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 19:05	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:35	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:19	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:37	MJG	TAL CHI

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:54	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 10:00	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:45	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:57	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (5-10)

Lab Sample ID: 500-174927-9

Date Collected: 12/11/19 13:50

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 09:51	STW	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522744	12/27/19 18:01	NRJ	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:47	EEN	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:39	MJG	TAL CHI

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 00:58	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 10:05	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:47	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:59	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 10:34		
					(End)	12/18/19 10:39		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 10:27	STW	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (10-15)

Lab Sample ID: 500-174927-10

Date Collected: 12/11/19 13:55

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522897	12/30/19 00:56	NRJ	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:51	EEN	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:41	MJG	TAL CHI

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Date Collected: 12/11/19 14:05

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 01:02	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 10:09	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:49	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 10:08	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159	(Start) 12/18/19 10:39 (End) 12/18/19 10:43	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (15-23)

Lab Sample ID: 500-174927-11

Date Collected: 12/11/19 14:05

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 10:53	STW	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 20:04	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:55	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:23	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:54	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Date Collected: 12/11/19 14:15

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 01:06	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 10:13	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:51	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 10:15	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159	(Start) 12/18/19 10:43 (End) 12/18/19 10:47	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (23-31)

Lab Sample ID: 500-174927-12

Date Collected: 12/11/19 14:15

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 11:18	STW	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522447	12/26/19 20:33	AJD	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 20:59	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:27	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:56	MJG	TAL CHI

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 01:10	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 10:17	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 11:53	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 10:17	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
					(Start)	12/18/19 10:47		
					(End)	12/18/19 10:52		
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (31-39)

Lab Sample ID: 500-174927-13

Date Collected: 12/11/19 14:20

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 11:44	STW	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522744	12/27/19 18:59	NRJ	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 21:03	EEN	TAL CHI
Total/NA	Prep	3050B			521134	12/17/19 17:17	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521646	12/19/19 19:31	JEF	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 08:58	MJG	TAL CHI

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522371	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522549	12/26/19 15:14	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 01:14	EEN	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6010B		1	522718	12/27/19 10:34	JEF	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	3010A			522552	12/26/19 15:19	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:02	FXG	TAL CHI
TCLP	Leach	1311			522374	12/24/19 12:15	BEC	TAL CHI
TCLP	Prep	7470A			522701	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 10:19	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	521159		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521066	12/17/19 13:43	LWN	TAL CHI

Client Sample ID: 2615V2-01-B28 (39-47)

Lab Sample ID: 500-174927-14

Date Collected: 12/11/19 14:30

Matrix: Solid

Date Received: 12/11/19 17:00

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520663	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521852	12/21/19 12:10	STW	TAL CHI
Total/NA	Prep	3541			521605	12/19/19 17:08	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522744	12/27/19 19:27	NRJ	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 18:25	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 13:29	EEN	TAL CHI
Total/NA	Prep	7471B			521649	12/20/19 11:30	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 09:01	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174927-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6
Phone: 708.534.5200 Fax: 708.53



500-174927 CQC

Report To (optional)
Contact: Dean Tiebort
Company: E+E
Address:
Address:
Phone:
Fax:
E-Mail:

Bill To (optional)
Contact: Dean Tiebort
Company: E+E
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-174927

Chain of Custody Number:

Page 1 of 2

Temperature °C of Cooler: 9.1 7.1

48qt

Client		Client Project #		Preservative		Parameter												Preservative Key	
ED1		0945-028																1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name				Parameter															
IDOT 176-001 WO 47E																			
Project Location/State				Lab Project #															
Chicago, IL																			
Sampler				Lab #															
M. Fischer				Rich Wright															
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TCCLP METALS	Comments								
			Date	Time															
1		2615V2-01-031 (0-5)	12/11/19	1150	5	S	X	X	X	X									
2		(5-10)		1155															
3		(10-15)		1200															
4		(15-23)		1210															
5		(23-31)		1220															
6		(31-39)		1230															
7		(39-47)		1240															
8		2615V2-01-028 (0-5)		1245															
9		(5-10)		1350															
10		(10-15)		1355															

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Requested Due Date

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Prepared By: <u>M. Fischer</u> Company: <u>ED1</u> Date: <u>12-11-19</u> Time: <u>1502</u>	Received By: <u>[Signature]</u> Company: <u>EA</u> Date: <u>12/11/19</u> Time: <u>1502</u>	Lab Courier: <u>TA</u>
Relinquished By: <u>[Signature]</u> Company: <u>EA</u> Date: <u>12/11/19</u> Time: <u>1700</u>	Received By: <u>[Signature]</u> Company: <u>TA-COE</u> Date: <u>12/11/19</u> Time: <u>1700</u>	Shipped: _____
Flashed By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key

- WW - Wastewater
- W - Water
- S - Soil
- SL - Sludge
- MS - Miscellaneous
- OL - Oil
- A - Air
- SE - Sediment
- SO - Soil
- L - Leachate
- WI - Wipe
- DW - Drinking Water
- O - Other

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO# Reference# _____

Chain of Custody Record

Lab Job #: 500-174927

Chain of Custody Number: _____

Page 2 of 2

Temperature °C of Cooler: 9.1 / 7.1

480

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Matrix		Matrix		Matrix			
Project Location/State		Lab Project #		Matrix		Matrix		Matrix			
Sampler		Lab PM		Matrix		Matrix		Matrix			
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					Comments
11		261502-01-028(15-23)	12-11-19	1405	5	S	X	X	X	X	
12		(23-31)		1415							
13		(31-39)		1420							
14		(39-47)		1430							

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested By: <u>M. Fischer</u>	Company: <u>EDI</u>	Date: <u>12/11/19</u>	Time: <u>1502</u>	Received By: <u>P. Neff</u>	Company: <u>EA</u>	Date: <u>12/11/19</u>	Time: <u>1502</u>
Requested By: <u>Michael</u>	Company: <u>EA</u>	Date: <u>12/11/19</u>	Time: <u>1700</u>	Received By: <u>John Scott</u>	Company: <u>EA</u>	Date: <u>12/11/19</u>	Time: <u>1700</u>

Lab Courier: JD
 Shipped: _____
 Hand Delivered: _____

Matrix Key

- WW - Wastewater
- W - Water
- S - Soil
- SL - Sludge
- MS - Miscellaneous
- OL - Oil
- A - Air
- SE - Sediment
- SO - Soil
- L - Leachate
- WI - Wipe
- DW - Drinking Water
- O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174927-1

Login Number: 174927

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	9.1,7.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-175006-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
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Authorized for release by:
12/30/2019 2:49:02 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Job ID: 500-175006-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-175006-1

Receipt

The samples were received on 12/12/2019 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.9° C and 7.3° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The following samples contained one base surrogate outside acceptance limits: 2615V2-01-B55 (0-5) (500-175006-1), 2615V2-01-B55 (5-10) (500-175006-2), 2615V2-01-B55 (10-15) (500-175006-3), 2615V2-01-B55 (31-39) (500-175006-7) and 2615V2-01-B55 (39-47) (500-175006-8). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) for preparation batch 500-521794 and analytical batch 500-522280 recovered outside control limits for the following analytes: 2,4-Dimethylphenol and 4-Nitrophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.034	J	0.039	0.0061	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.080		0.080	0.0073	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.031	J	0.039	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.043		0.039	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.35		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.051		0.039	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.44		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.80		0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.20		0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.28		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.40		0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.18		0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.27		0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.11		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.10		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.8		0.60	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.60	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.62		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	73000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.60	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	12		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	40000		60	30	mg/Kg	10	☼	6010B	Total/NA
Manganese	300		0.60	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	31		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3000		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.77		0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	1.7		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	730		60	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.55	J	0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	46		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.45	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.16	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.050		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.015	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.090		0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.010	J	0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (5-10) (Continued)

Lab Sample ID: 500-175006-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.14		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.041	0.0077	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.042		0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.041		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.041	0.0080	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.3		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	46000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	21000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	41		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.83		0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	300		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	71		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.019	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.052		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.14	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.024	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.061	J	0.083	0.0075	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.029	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0080	J	0.041	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.021	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.6		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	19	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (10-15) (Continued)

Lab Sample ID: 500-175006-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.51	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.87		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	52		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.097	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.047		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.077	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.035		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.031	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.12		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.036	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.027	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3100		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.56	J	0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.9		0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.76		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (15-23) (Continued)

Lab Sample ID: 500-175006-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	19		0.29	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.62		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.12	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.015	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.044		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.025	J	0.082	0.0074	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.22	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	7.8		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.69		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	18	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	49000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	29		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.59		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.018	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.052		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.15		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.030	J	0.081	0.0074	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0059	J	0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.094		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.031	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.020	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.74		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	20	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	48000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3500		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.55	J	0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	220		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.92		0.59	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.9		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.047		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.031	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.028	J	0.075	0.0068	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.023	J	0.037	0.0066	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.19		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.035	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.040		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.021	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	12		0.51	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	20		0.51	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	12	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (31-39) (Continued)

Lab Sample ID: 500-175006-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.27	B	0.10	0.018	mg/Kg	1	☼	6010B	Total/NA
Calcium	48000		100	17	mg/Kg	10	☼	6010B	Total/NA
Chromium	10		0.51	0.25	mg/Kg	1	☼	6010B	Total/NA
Cobalt	16		0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Copper	43		0.51	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	10	5.3	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.1	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.51	0.074	mg/Kg	1	☼	6010B	Total/NA
Nickel	39		0.51	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1900		26	9.1	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.61		0.51	0.30	mg/Kg	1	☼	6010B	Total/NA
Silver	1.2		0.26	0.066	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		51	7.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.4		0.51	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.039		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.087		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.021	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.068	J	0.075	0.0068	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.043	J	0.19	0.043	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.23		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.014	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.046		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.026	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	11		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	23		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	14	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	48000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	13		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	34		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	20000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	36		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (39-47) (Continued)

Lab Sample ID: 500-175006-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2300		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.47	J	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.3		0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	170		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.55	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	68		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.093	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.042		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.092		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.080	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.059		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-175006-1	2615V2-01-B55 (0-5)	Solid	12/12/19 08:20	12/12/19 15:40	
500-175006-2	2615V2-01-B55 (5-10)	Solid	12/12/19 08:25	12/12/19 15:40	
500-175006-3	2615V2-01-B55 (10-15)	Solid	12/12/19 08:35	12/12/19 15:40	
500-175006-4	2615V2-01-B55 (15-23)	Solid	12/12/19 08:45	12/12/19 15:40	
500-175006-5	2615V2-01-B55 (23-31)	Solid	12/12/19 08:50	12/12/19 15:40	
500-175006-6	2615V2-01-B55 (23-31)D	Solid	12/12/19 08:50	12/12/19 15:40	
500-175006-7	2615V2-01-B55 (31-39)	Solid	12/12/19 09:00	12/12/19 15:40	
500-175006-8	2615V2-01-B55 (39-47)	Solid	12/12/19 09:15	12/12/19 15:40	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Date Collected: 12/12/19 08:20

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/12/19 18:40	12/24/19 10:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	12/12/19 18:40	12/24/19 10:10	1
4-Bromofluorobenzene (Surr)	93		75 - 131	12/12/19 18:40	12/24/19 10:10	1
Dibromofluoromethane	91		75 - 126	12/12/19 18:40	12/24/19 10:10	1
Toluene-d8 (Surr)	92		75 - 124	12/12/19 18:40	12/24/19 10:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Date Collected: 12/12/19 08:20

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,4-Dimethylphenol	<0.39	*	0.39	0.15	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Naphthalene	0.034	J	0.039	0.0061	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2-Methylnaphthalene	0.080		0.080	0.0073	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Acenaphthene	0.031	J	0.039	0.0071	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4-Nitrophenol	<0.80	*	0.80	0.38	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Fluorene	0.043		0.039	0.0056	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Phenanthrene	0.35		0.039	0.0055	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Anthracene	0.051		0.039	0.0066	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Fluoranthene	0.44		0.039	0.0073	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Pyrene	0.80		0.039	0.0078	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Benzo[a]anthracene	0.20		0.039	0.0053	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Date Collected: 12/12/19 08:20

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.28		0.039	0.011	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Benzo[b]fluoranthene	0.40		0.039	0.0085	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Benzo[k]fluoranthene	0.18		0.039	0.012	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Benzo[a]pyrene	0.27		0.039	0.0076	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Indeno[1,2,3-cd]pyrene	0.11		0.039	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Benzo[g,h,i]perylene	0.10		0.039	0.013	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	12/20/19 15:54	12/28/19 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	116		31 - 166				12/20/19 15:54	12/28/19 17:10	1
Phenol-d5	104		30 - 153				12/20/19 15:54	12/28/19 17:10	1
Nitrobenzene-d5	85		37 - 147				12/20/19 15:54	12/28/19 17:10	1
2-Fluorobiphenyl	93		43 - 145				12/20/19 15:54	12/28/19 17:10	1
2,4,6-Tribromophenol	64		31 - 143				12/20/19 15:54	12/28/19 17:10	1
Terphenyl-d14	209	X	42 - 157				12/20/19 15:54	12/28/19 17:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Arsenic	6.8		0.60	0.20	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Barium	30		0.60	0.068	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Beryllium	0.62		0.24	0.056	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Boron	19 B		3.0	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Cadmium	0.17 B		0.12	0.021	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Calcium	73000		120	20	mg/Kg	☼	12/18/19 18:04	12/20/19 12:34	10
Chromium	14		0.60	0.29	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Cobalt	12		0.30	0.078	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Copper	24		0.60	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Iron	17000 B		12	6.2	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Lead	14		0.30	0.14	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Magnesium	40000		60	30	mg/Kg	☼	12/18/19 18:04	12/20/19 12:34	10
Manganese	300		0.60	0.086	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Nickel	31		0.60	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Potassium	3000		30	11	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Selenium	0.77		0.60	0.35	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Silver	1.7		0.30	0.077	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Sodium	730		60	8.8	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Thallium	0.55 J		0.60	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Vanadium	20		0.30	0.070	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1
Zinc	46		1.2	0.52	mg/Kg	☼	12/18/19 18:04	12/19/19 17:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.45 J		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 09:36	1
Boron	0.16 J		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:36	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Date Collected: 12/12/19 08:20

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.7

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 09:36	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:36	1
Cobalt	0.014	J	0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:36	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 09:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 09:36	1
Manganese	1.5		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:36	1
Nickel	0.050		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:36	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 09:36	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:36	1
Zinc	0.18	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 09:36	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.015	J	0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:17	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 08:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.019	0.0062	mg/Kg	☼	12/20/19 14:05	12/23/19 10:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/19/19 11:23	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 10:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	12/12/19 18:40	12/24/19 10:36	1
4-Bromofluorobenzene (Surr)	90		75 - 131	12/12/19 18:40	12/24/19 10:36	1
Dibromofluoromethane	93		75 - 126	12/12/19 18:40	12/24/19 10:36	1
Toluene-d8 (Surr)	93		75 - 124	12/12/19 18:40	12/24/19 10:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,4-Dimethylphenol	<0.41	*	0.41	0.16	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2-Methylnaphthalene	0.090		0.083	0.0076	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4-Nitrophenol	<0.83	*	0.83	0.39	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Fluorene	0.010	J	0.041	0.0058	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Phenanthrene	0.14		0.041	0.0058	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Fluoranthene	0.020	J	0.041	0.0077	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Pyrene	0.042		0.041	0.0082	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.041		0.041	0.011	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Benzo[a]pyrene	0.013	J	0.041	0.0080	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/20/19 15:54	12/27/19 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	127		31 - 166				12/20/19 15:54	12/27/19 19:56	1
Phenol-d5	104		30 - 153				12/20/19 15:54	12/27/19 19:56	1
Nitrobenzene-d5	90		37 - 147				12/20/19 15:54	12/27/19 19:56	1
2-Fluorobiphenyl	102		43 - 145				12/20/19 15:54	12/27/19 19:56	1
2,4,6-Tribromophenol	61		31 - 143				12/20/19 15:54	12/27/19 19:56	1
Terphenyl-d14	163	X	42 - 157				12/20/19 15:54	12/27/19 19:56	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Arsenic	8.3		0.61	0.21	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Barium	37		0.61	0.069	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Beryllium	0.70		0.24	0.057	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Boron	18	B	3.0	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Cadmium	0.23	B	0.12	0.022	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Calcium	46000		120	21	mg/Kg	☼	12/18/19 18:04	12/20/19 12:38	10
Chromium	18		0.61	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Cobalt	15		0.30	0.080	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Copper	33		0.61	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Iron	21000	B	12	6.3	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Lead	16		0.30	0.14	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Magnesium	21000		6.1	3.0	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Manganese	310		0.61	0.088	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Nickel	41		0.61	0.18	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Potassium	3200		30	11	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Selenium	0.83		0.61	0.36	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Silver	1.9		0.30	0.078	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Sodium	300		61	9.0	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Thallium	1.1		0.61	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Vanadium	20		0.30	0.072	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1
Zinc	71		1.2	0.53	mg/Kg	☼	12/18/19 18:04	12/19/19 17:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 09:49	1
Boron	0.12	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 09:49	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:49	1
Cobalt	0.019	J	0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:49	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 09:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 09:49	1
Manganese	1.8		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:49	1
Nickel	0.052		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:49	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 09:49	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:49	1
Zinc	0.14	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 09:49	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.024	J	0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:22	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 08:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.020	0.0066	mg/Kg	☼	12/20/19 14:05	12/23/19 10:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/19/19 11:27	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Carbon disulfide	<0.0045		0.0045	0.00095	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 11:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	12/12/19 18:40	12/24/19 11:02	1
4-Bromofluorobenzene (Surr)	90		75 - 131	12/12/19 18:40	12/24/19 11:02	1
Dibromofluoromethane	93		75 - 126	12/12/19 18:40	12/24/19 11:02	1
Toluene-d8 (Surr)	93		75 - 124	12/12/19 18:40	12/24/19 11:02	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,4-Dimethylphenol	<0.41	*	0.41	0.16	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2-Methylnaphthalene	0.061	J	0.083	0.0075	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4-Nitrophenol	<0.83	*	0.83	0.39	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Pyrene	0.029	J	0.041	0.0081	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Benzo[a]pyrene	0.0080	J	0.041	0.0079	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
Benzo[g,h,i]perylene	0.021	J	0.041	0.013	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/20/19 15:54	12/27/19 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		31 - 166	12/20/19 15:54	12/27/19 20:24	1
Phenol-d5	104		30 - 153	12/20/19 15:54	12/27/19 20:24	1
Nitrobenzene-d5	85		37 - 147	12/20/19 15:54	12/27/19 20:24	1
2-Fluorobiphenyl	99		43 - 145	12/20/19 15:54	12/27/19 20:24	1
2,4,6-Tribromophenol	52		31 - 143	12/20/19 15:54	12/27/19 20:24	1
Terphenyl-d14	171	X	42 - 157	12/20/19 15:54	12/27/19 20:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Arsenic	7.6		0.61	0.21	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Barium	41		0.61	0.069	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Beryllium	0.68		0.24	0.057	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Boron	19	B	3.0	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Cadmium	0.18	B	0.12	0.022	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Calcium	51000		120	21	mg/Kg	☼	12/18/19 18:04	12/20/19 12:43	10
Chromium	17		0.61	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Copper	29		0.61	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Iron	20000	B	12	6.3	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Lead	14		0.30	0.14	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Magnesium	23000		6.1	3.0	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Manganese	320		0.61	0.088	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Nickel	35		0.61	0.18	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Potassium	3300		30	11	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Selenium	0.51	J	0.61	0.36	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Silver	2.0		0.30	0.078	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Sodium	210		61	9.0	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Thallium	0.87		0.61	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Vanadium	20		0.30	0.071	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1
Zinc	52		1.2	0.53	mg/Kg	☼	12/18/19 18:04	12/19/19 17:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 09:54	1
Boron	0.097	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:54	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 09:54	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:54	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:54	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 09:54	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 09:54	1
Manganese	1.8		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:54	1
Nickel	0.047		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:54	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 09:54	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:54	1
Zinc	0.077	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 09:54	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.035		0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:34	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 08:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.018	0.0060	mg/Kg	☼	12/20/19 14:05	12/23/19 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/19/19 11:36	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Date Collected: 12/12/19 08:45

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	12/12/19 18:40	12/24/19 11:27	1
4-Bromofluorobenzene (Surr)	90		75 - 131	12/12/19 18:40	12/24/19 11:27	1
Dibromofluoromethane	93		75 - 126	12/12/19 18:40	12/24/19 11:27	1
Toluene-d8 (Surr)	92		75 - 124	12/12/19 18:40	12/24/19 11:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Date Collected: 12/12/19 08:45

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,4-Dimethylphenol	<0.41	*	0.41	0.16	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2-Methylnaphthalene	0.031	J	0.083	0.0076	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4-Nitrophenol	<0.83	*	0.83	0.39	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Phenanthrene	0.12		0.041	0.0057	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Pyrene	0.022	J	0.041	0.0082	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Date Collected: 12/12/19 08:45

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	J	0.041	0.011	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Benzo[g,h,i]perylene	0.027	J	0.041	0.013	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/20/19 15:54	12/27/19 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	101		31 - 166				12/20/19 15:54	12/27/19 20:53	1
Phenol-d5	57		30 - 153				12/20/19 15:54	12/27/19 20:53	1
Nitrobenzene-d5	41		37 - 147				12/20/19 15:54	12/27/19 20:53	1
2-Fluorobiphenyl	68		43 - 145				12/20/19 15:54	12/27/19 20:53	1
2,4,6-Tribromophenol	67		31 - 143				12/20/19 15:54	12/27/19 20:53	1
Terphenyl-d14	137		42 - 157				12/20/19 15:54	12/27/19 20:53	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Arsenic	6.9		0.57	0.20	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Barium	39		0.57	0.065	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Beryllium	0.65		0.23	0.053	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Boron	17	B	2.9	0.27	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Cadmium	0.16	B	0.11	0.021	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Calcium	57000		110	19	mg/Kg	☼	12/18/19 18:04	12/20/19 12:47	10
Chromium	16		0.57	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Cobalt	13		0.29	0.075	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Copper	24		0.57	0.16	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Iron	19000	B	11	5.9	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Lead	14		0.29	0.13	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Magnesium	23000		5.7	2.8	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Manganese	320		0.57	0.083	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Nickel	34		0.57	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Potassium	3100		29	10	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Selenium	0.56	J	0.57	0.34	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Silver	1.9		0.29	0.074	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Sodium	210		57	8.4	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Thallium	0.76		0.57	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Vanadium	19		0.29	0.067	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1
Zinc	55		1.1	0.50	mg/Kg	☼	12/18/19 18:04	12/19/19 17:40	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.62		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 09:58	1
Boron	0.12	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 09:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Date Collected: 12/12/19 08:45

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 09:58	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:58	1
Cobalt	0.015	J	0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:58	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 09:58	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 09:58	1
Manganese	1.9		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:58	1
Nickel	0.044		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 09:58	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 09:58	1
Zinc	0.18	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 09:58	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.11		0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:38	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:40	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 08:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.020	0.0068	mg/Kg	☼	12/20/19 14:05	12/23/19 10:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2		0.2	0.2	SU			12/19/19 11:40	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 11:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 134	12/12/19 18:40	12/24/19 11:53	1
4-Bromofluorobenzene (Surr)	100		75 - 131	12/12/19 18:40	12/24/19 11:53	1
Dibromofluoromethane	93		75 - 126	12/12/19 18:40	12/24/19 11:53	1
Toluene-d8 (Surr)	93		75 - 124	12/12/19 18:40	12/24/19 11:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,4-Dimethylphenol	<0.40	*	0.40	0.15	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2-Methylnaphthalene	0.025	J	0.082	0.0074	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4-Nitrophenol	<0.82	*	0.82	0.39	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Phenanthrene	0.10		0.040	0.0056	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1

Eurolins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 81.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.040	0.011	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Benzo[g,h,i]perylene	0.024	J	0.040	0.013	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/20/19 15:54	12/28/19 09:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	100		31 - 166				12/20/19 15:54	12/28/19 09:29	1
Phenol-d5	88		30 - 153				12/20/19 15:54	12/28/19 09:29	1
Nitrobenzene-d5	80		37 - 147				12/20/19 15:54	12/28/19 09:29	1
2-Fluorobiphenyl	86		43 - 145				12/20/19 15:54	12/28/19 09:29	1
2,4,6-Tribromophenol	44		31 - 143				12/20/19 15:54	12/28/19 09:29	1
Terphenyl-d14	129		42 - 157				12/20/19 15:54	12/28/19 09:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.22	J	1.2	0.22	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Arsenic	7.8		0.58	0.20	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Barium	38		0.58	0.066	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Beryllium	0.69		0.23	0.054	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Boron	18	B	2.9	0.27	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Cadmium	0.18	B	0.12	0.021	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Calcium	49000		120	20	mg/Kg	☼	12/18/19 18:04	12/20/19 12:51	10
Chromium	17		0.58	0.29	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Cobalt	14		0.29	0.076	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Copper	29		0.58	0.16	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Iron	20000	B	12	6.0	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Lead	16		0.29	0.13	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Magnesium	24000		5.8	2.9	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Manganese	340		0.58	0.084	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Nickel	37		0.58	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Potassium	3300		29	10	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Selenium	0.47	J	0.58	0.34	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Silver	1.8		0.29	0.075	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Sodium	210		58	8.6	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Vanadium	20		0.29	0.068	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1
Zinc	53		1.2	0.51	mg/Kg	☼	12/18/19 18:04	12/19/19 17:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 10:02	1
Boron	0.11	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:02	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 81.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 10:02	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:02	1
Cobalt	0.018	J	0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:02	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 10:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 10:02	1
Manganese	2.0		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:02	1
Nickel	0.052		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:02	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 10:02	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:02	1
Zinc	0.18	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 10:02	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.15		0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:42	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 08:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.020	0.0066	mg/Kg	☼	12/20/19 14:05	12/23/19 10:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.2	0.2	SU			12/19/19 11:44	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Acetone	0.011	J	0.017	0.0072	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 12:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	12/12/19 18:40	12/24/19 12:19	1
4-Bromofluorobenzene (Surr)	94		75 - 131	12/12/19 18:40	12/24/19 12:19	1
Dibromofluoromethane	92		75 - 126	12/12/19 18:40	12/24/19 12:19	1
Toluene-d8 (Surr)	94		75 - 124	12/12/19 18:40	12/24/19 12:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,4-Dimethylphenol	<0.40	*	0.40	0.15	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2-Methylnaphthalene	0.030	J	0.081	0.0074	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4-Nitrophenol	<0.81	*	0.81	0.38	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Fluorene	0.0059	J	0.040	0.0057	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Hexachlorobenzene	<0.081		0.081	0.0094	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Phenanthrene	0.094		0.040	0.0056	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Pyrene	0.022	J	0.040	0.0080	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Benzof[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.031	J	0.040	0.011	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
Benzo[g,h,i]perylene	0.020	J	0.040	0.013	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	12/20/19 15:54	12/28/19 09:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		31 - 166	12/20/19 15:54	12/28/19 09:58	1
Phenol-d5	98		30 - 153	12/20/19 15:54	12/28/19 09:58	1
Nitrobenzene-d5	82		37 - 147	12/20/19 15:54	12/28/19 09:58	1
2-Fluorobiphenyl	87		43 - 145	12/20/19 15:54	12/28/19 09:58	1
2,4,6-Tribromophenol	53		31 - 143	12/20/19 15:54	12/28/19 09:58	1
Terphenyl-d14	139		42 - 157	12/20/19 15:54	12/28/19 09:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Arsenic	6.9		0.59	0.20	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Barium	45		0.59	0.068	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Beryllium	0.74		0.24	0.055	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Boron	20	B	3.0	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Calcium	48000		120	20	mg/Kg	☼	12/18/19 18:04	12/20/19 12:55	10
Chromium	18		0.59	0.29	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Cobalt	14		0.30	0.078	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Copper	26		0.59	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Iron	20000	B	12	6.2	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Lead	13		0.30	0.14	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Magnesium	22000		5.9	2.9	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Manganese	310		0.59	0.086	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Nickel	36		0.59	0.17	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Potassium	3500		30	11	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Selenium	0.55	J	0.59	0.35	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Silver	2.1		0.30	0.077	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Sodium	220		59	8.8	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Thallium	0.92		0.59	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Vanadium	22		0.30	0.070	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1
Zinc	53		1.2	0.52	mg/Kg	☼	12/18/19 18:04	12/19/19 17:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 10:07	1
Boron	0.11	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 10:07	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:07	1
Cobalt	0.017	J	0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:07	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 10:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 10:07	1
Manganese	1.9		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:07	1
Nickel	0.047		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:07	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 10:07	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:07	1
Zinc	0.031	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 10:07	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.24		0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:46	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:44	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:44	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 08:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.018	0.0060	mg/Kg	☼	12/20/19 14:05	12/23/19 10:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1		0.2	0.2	SU			12/19/19 11:49	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Date Collected: 12/12/19 09:00

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 12:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	12/12/19 18:40	12/24/19 12:45	1
4-Bromofluorobenzene (Surr)	114		75 - 131	12/12/19 18:40	12/24/19 12:45	1
Dibromofluoromethane	92		75 - 126	12/12/19 18:40	12/24/19 12:45	1
Toluene-d8 (Surr)	99		75 - 124	12/12/19 18:40	12/24/19 12:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Date Collected: 12/12/19 09:00

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,4-Dimethylphenol	<0.37	*	0.37	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2-Methylnaphthalene	0.028	J	0.075	0.0068	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Acenaphthene	0.023	J	0.037	0.0066	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4-Nitrophenol	<0.75	*	0.75	0.35	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Phenanthrene	0.19		0.037	0.0051	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Pyrene	0.035	J	0.037	0.0073	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Benzof[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Date Collected: 12/12/19 09:00

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.040		0.037	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
Benzo[g,h,i]perylene	0.021	J	0.037	0.012	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/20/19 15:54	12/28/19 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	116		31 - 166	12/20/19 15:54	12/28/19 13:19	1
Phenol-d5	106		30 - 153	12/20/19 15:54	12/28/19 13:19	1
Nitrobenzene-d5	98		37 - 147	12/20/19 15:54	12/28/19 13:19	1
2-Fluorobiphenyl	104		43 - 145	12/20/19 15:54	12/28/19 13:19	1
2,4,6-Tribromophenol	64		31 - 143	12/20/19 15:54	12/28/19 13:19	1
Terphenyl-d14	173	X	42 - 157	12/20/19 15:54	12/28/19 13:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Arsenic	12		0.51	0.18	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Barium	20		0.51	0.059	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Beryllium	0.47		0.21	0.048	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Boron	12	B	2.6	0.24	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Cadmium	0.27	B	0.10	0.018	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Calcium	48000		100	17	mg/Kg	☼	12/18/19 18:04	12/20/19 13:00	10
Chromium	10		0.51	0.25	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Cobalt	16		0.26	0.067	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Copper	43		0.51	0.14	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Iron	20000	B	10	5.3	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Lead	19		0.26	0.12	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Magnesium	24000		5.1	2.5	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Manganese	330		0.51	0.074	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Nickel	39		0.51	0.15	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Potassium	1900		26	9.1	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Selenium	0.61		0.51	0.30	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Silver	1.2		0.26	0.066	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Sodium	200		51	7.6	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Thallium	1.4		0.51	0.26	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Vanadium	15		0.26	0.061	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1
Zinc	51		1.0	0.45	mg/Kg	☼	12/18/19 18:04	12/19/19 17:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.35	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 10:11	1
Boron	0.074	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:11	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Date Collected: 12/12/19 09:00

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Chromium	<0.025		0.025	0.010	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Cobalt	0.039		0.025	0.010	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Iron	<0.40		0.40	0.20	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Lead	<0.0075		0.0075	0.0075	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Manganese	1.8		0.025	0.010	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Nickel	0.087		0.025	0.010	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Selenium	<0.050		0.050	0.020	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Silver	<0.025		0.025	0.010	mg/L	-	12/26/19 15:21	12/27/19 10:11	1
Zinc	0.18	J	0.50	0.020	mg/L	-	12/26/19 15:21	12/27/19 10:11	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.021	J	0.025	0.010	mg/L	-	12/26/19 15:17	12/28/19 02:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L	-	12/26/19 15:21	12/27/19 12:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L	-	12/26/19 15:21	12/27/19 12:46	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	-	12/27/19 09:45	12/30/19 09:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.018	0.0059	mg/Kg	☼	12/20/19 14:05	12/23/19 10:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.2	0.2	SU	-		12/19/19 11:53	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,1-Dichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Bromoform	<0.0016		0.0016	0.00045	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Chlorobenzene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00043	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Ethylbenzene	<0.0016		0.0016	0.00074	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Trichloroethene	<0.0016		0.0016	0.00052	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/12/19 18:40	12/24/19 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 134	12/12/19 18:40	12/24/19 13:11	1
4-Bromofluorobenzene (Surr)	94		75 - 131	12/12/19 18:40	12/24/19 13:11	1
Dibromofluoromethane	94		75 - 126	12/12/19 18:40	12/24/19 13:11	1
Toluene-d8 (Surr)	95		75 - 124	12/12/19 18:40	12/24/19 13:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,4-Dimethylphenol	<0.37	*	0.37	0.14	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2-Methylnaphthalene	0.068	J	0.075	0.0068	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Dibenzofuran	0.043	J	0.19	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4-Nitrophenol	<0.75	*	0.75	0.35	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Fluorene	0.013	J	0.037	0.0052	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Phenanthrene	0.23		0.037	0.0052	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Anthracene	0.014	J	0.037	0.0062	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Pyrene	0.046		0.037	0.0074	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Benzof[anthracene	<0.037		0.037	0.0050	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
Benzo[g,h,i]perylene	0.026	J	0.037	0.012	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/20/19 15:54	12/28/19 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	106		31 - 166	12/20/19 15:54	12/28/19 13:49	1
Phenol-d5	100		30 - 153	12/20/19 15:54	12/28/19 13:49	1
Nitrobenzene-d5	87		37 - 147	12/20/19 15:54	12/28/19 13:49	1
2-Fluorobiphenyl	100		43 - 145	12/20/19 15:54	12/28/19 13:49	1
2,4,6-Tribromophenol	61		31 - 143	12/20/19 15:54	12/28/19 13:49	1
Terphenyl-d14	168	X	42 - 157	12/20/19 15:54	12/28/19 13:49	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Arsenic	11		0.55	0.19	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Barium	23		0.55	0.063	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Beryllium	0.53		0.22	0.052	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Boron	14	B	2.8	0.26	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Cadmium	0.28	B	0.11	0.020	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Calcium	48000		110	19	mg/Kg	☼	12/18/19 18:04	12/20/19 13:04	10
Chromium	13		0.55	0.27	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Cobalt	15		0.28	0.072	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Copper	34		0.55	0.15	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Iron	20000	B	11	5.7	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Lead	18		0.28	0.13	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Magnesium	25000		5.5	2.7	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Manganese	330		0.55	0.080	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Nickel	36		0.55	0.16	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Potassium	2300		28	9.8	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Selenium	0.47	J	0.55	0.32	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Silver	1.3		0.28	0.071	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Sodium	170		55	8.2	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Thallium	1.2		0.55	0.28	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Vanadium	15		0.28	0.065	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1
Zinc	68		1.1	0.48	mg/Kg	☼	12/18/19 18:04	12/19/19 17:56	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.39	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 10:16	1
Boron	0.093	J	0.50	0.050	mg/L		12/26/19 15:21	12/27/19 10:16	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 10:16	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:16	1
Cobalt	0.042		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:16	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 10:16	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 10:16	1
Manganese	1.8		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:16	1
Nickel	0.092		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:16	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 10:16	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 10:16	1
Zinc	0.080	J	0.50	0.020	mg/L		12/26/19 15:21	12/27/19 10:16	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.059		0.025	0.010	mg/L		12/26/19 15:17	12/28/19 02:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:48	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.017	0.0058	mg/Kg	☼	12/20/19 14:05	12/23/19 10:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.9		0.2	0.2	SU			12/19/19 11:57	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

GC/MS VOA

Prep Batch: 520673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	5035	
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	5035	
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	5035	
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	5035	
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	5035	
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	5035	
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	5035	
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	5035	
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	5035	
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	5035	
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	5035	
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	5035	

Analysis Batch: 522235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	8260B	520673
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	8260B	520673
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	8260B	520673
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	8260B	520673
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	8260B	520673
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	8260B	520673
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	8260B	520673
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	8260B	520673
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	8260B	520673
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	8260B	520673
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	8260B	520673
MB 500-522235/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-522235/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 500-522235/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 522395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	8260B	520673
MB 500-522395/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-522395/28	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 521794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	3541	
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	3541	
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	3541	
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	3541	
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	3541	
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	3541	
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	3541	
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	3541	
500-175006-9 - DL	2615V2-01-B41 (0-4)	Total/NA	Solid	3541	
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	3541	
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	3541	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

GC/MS Semi VOA (Continued)

Prep Batch: 521794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	3541	
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	3541	
MB 500-521794/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-521794/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 522280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521794/1-A	Method Blank	Total/NA	Solid	8270D	521794
LCS 500-521794/2-A	Lab Control Sample	Total/NA	Solid	8270D	521794

Analysis Batch: 522744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	8270D	521794
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	8270D	521794
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	8270D	521794

Analysis Batch: 522820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	8270D	521794
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	8270D	521794
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	8270D	521794
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	8270D	521794
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	8270D	521794
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	8270D	521794
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	8270D	521794
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	8270D	521794
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	8270D	521794

Analysis Batch: 522891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-9 - DL	2615V2-01-B41 (0-4)	Total/NA	Solid	8270D	521794

Metals

Prep Batch: 521387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	3050B	
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	3050B	
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	3050B	
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	3050B	
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	3050B	
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	3050B	
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	3050B	
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	3050B	
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	3050B	
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	3050B	
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	3050B	
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	3050B	
MB 500-521387/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-521387/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Metals

Analysis Batch: 521634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	6010B	521387
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	6010B	521387
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	6010B	521387
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	6010B	521387
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	6010B	521387
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	6010B	521387
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	6010B	521387
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	6010B	521387
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	6010B	521387
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	6010B	521387
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	6010B	521387
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	6010B	521387
MB 500-521387/1-A	Method Blank	Total/NA	Solid	6010B	521387
LCS 500-521387/2-A	Lab Control Sample	Total/NA	Solid	6010B	521387

Prep Batch: 521768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	7471B	
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	7471B	
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	7471B	
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	7471B	
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	7471B	
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	7471B	
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	7471B	
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	7471B	
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	7471B	
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	7471B	
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	7471B	
MB 500-521768/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521768/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-175006-10 MS	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	
500-175006-10 MSD	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	
500-175006-10 DU	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	

Analysis Batch: 522047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	6010B	521387
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	6010B	521387
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	6010B	521387
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	6010B	521387
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	6010B	521387
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	6010B	521387
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	6010B	521387
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	6010B	521387
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	6010B	521387
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	6010B	521387
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	6010B	521387

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Metals

Analysis Batch: 522162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	7471B	521768
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	7471B	521768
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	7471B	521768
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	7471B	521768
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	7471B	521768
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	7471B	521768
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	7471B	521768
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	7471B	521768
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	7471B	521768
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	521768
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	7471B	521768
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	7471B	521768
MB 500-521768/12-A	Method Blank	Total/NA	Solid	7471B	521768
LCS 500-521768/13-A	Lab Control Sample	Total/NA	Solid	7471B	521768
500-175006-10 MS	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	521768
500-175006-10 MSD	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	521768
500-175006-10 DU	2615V2-01-B41 (30-35)	Total/NA	Solid	7471B	521768

Leach Batch: 522372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	SPLP East	Solid	1312	
500-175006-2	2615V2-01-B55 (5-10)	SPLP East	Solid	1312	
500-175006-3	2615V2-01-B55 (10-15)	SPLP East	Solid	1312	
500-175006-4	2615V2-01-B55 (15-23)	SPLP East	Solid	1312	
500-175006-5	2615V2-01-B55 (23-31)	SPLP East	Solid	1312	
500-175006-6	2615V2-01-B55 (23-31)D	SPLP East	Solid	1312	
500-175006-7	2615V2-01-B55 (31-39)	SPLP East	Solid	1312	
500-175006-8	2615V2-01-B55 (39-47)	SPLP East	Solid	1312	
500-175006-9	2615V2-01-B41 (0-4)	SPLP East	Solid	1312	
500-175006-10	2615V2-01-B41 (30-35)	SPLP East	Solid	1312	
500-175006-11	2615V2-01-B41 (35-40)	SPLP East	Solid	1312	
500-175006-12	2615V2-01-B41 (40-45)	SPLP East	Solid	1312	
LB 500-522372/1-B	Method Blank	SPLP East	Solid	1312	
500-175006-12 MS	2615V2-01-B41 (40-45)	SPLP East	Solid	1312	
500-175006-12 DU	2615V2-01-B41 (40-45)	SPLP East	Solid	1312	

Leach Batch: 522375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	TCLP	Solid	1311	
500-175006-2	2615V2-01-B55 (5-10)	TCLP	Solid	1311	
500-175006-3	2615V2-01-B55 (10-15)	TCLP	Solid	1311	
500-175006-4	2615V2-01-B55 (15-23)	TCLP	Solid	1311	
500-175006-5	2615V2-01-B55 (23-31)	TCLP	Solid	1311	
500-175006-6	2615V2-01-B55 (23-31)D	TCLP	Solid	1311	
500-175006-7	2615V2-01-B55 (31-39)	TCLP	Solid	1311	
500-175006-8	2615V2-01-B55 (39-47)	TCLP	Solid	1311	
500-175006-9	2615V2-01-B41 (0-4)	TCLP	Solid	1311	
500-175006-10	2615V2-01-B41 (30-35)	TCLP	Solid	1311	
500-175006-11	2615V2-01-B41 (35-40)	TCLP	Solid	1311	
500-175006-12	2615V2-01-B41 (40-45)	TCLP	Solid	1311	
LB 500-522375/1-B	Method Blank	TCLP	Solid	1311	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Metals (Continued)

Leach Batch: 522375 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-522375/1-C	Method Blank	TCLP	Solid	1311	
500-175006-2 MS	2615V2-01-B55 (5-10)	TCLP	Solid	1311	
500-175006-11 MS	2615V2-01-B41 (35-40)	TCLP	Solid	1311	
500-175006-2 DU	2615V2-01-B55 (5-10)	TCLP	Solid	1311	
500-175006-11 DU	2615V2-01-B41 (35-40)	TCLP	Solid	1311	

Prep Batch: 522551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	SPLP East	Solid	3010A	522372
500-175006-2	2615V2-01-B55 (5-10)	SPLP East	Solid	3010A	522372
500-175006-3	2615V2-01-B55 (10-15)	SPLP East	Solid	3010A	522372
500-175006-4	2615V2-01-B55 (15-23)	SPLP East	Solid	3010A	522372
500-175006-5	2615V2-01-B55 (23-31)	SPLP East	Solid	3010A	522372
500-175006-6	2615V2-01-B55 (23-31)D	SPLP East	Solid	3010A	522372
500-175006-7	2615V2-01-B55 (31-39)	SPLP East	Solid	3010A	522372
500-175006-8	2615V2-01-B55 (39-47)	SPLP East	Solid	3010A	522372
500-175006-9	2615V2-01-B41 (0-4)	SPLP East	Solid	3010A	522372
500-175006-10	2615V2-01-B41 (30-35)	SPLP East	Solid	3010A	522372
500-175006-11	2615V2-01-B41 (35-40)	SPLP East	Solid	3010A	522372
500-175006-12	2615V2-01-B41 (40-45)	SPLP East	Solid	3010A	522372
LB 500-522372/1-B	Method Blank	SPLP East	Solid	3010A	522372
LCS 500-522551/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-175006-12 MS	2615V2-01-B41 (40-45)	SPLP East	Solid	3010A	522372
500-175006-12 DU	2615V2-01-B41 (40-45)	SPLP East	Solid	3010A	522372

Prep Batch: 522553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	TCLP	Solid	3010A	522375
500-175006-2	2615V2-01-B55 (5-10)	TCLP	Solid	3010A	522375
500-175006-3	2615V2-01-B55 (10-15)	TCLP	Solid	3010A	522375
500-175006-4	2615V2-01-B55 (15-23)	TCLP	Solid	3010A	522375
500-175006-5	2615V2-01-B55 (23-31)	TCLP	Solid	3010A	522375
500-175006-6	2615V2-01-B55 (23-31)D	TCLP	Solid	3010A	522375
500-175006-7	2615V2-01-B55 (31-39)	TCLP	Solid	3010A	522375
500-175006-8	2615V2-01-B55 (39-47)	TCLP	Solid	3010A	522375
500-175006-9	2615V2-01-B41 (0-4)	TCLP	Solid	3010A	522375
500-175006-10	2615V2-01-B41 (30-35)	TCLP	Solid	3010A	522375
500-175006-11	2615V2-01-B41 (35-40)	TCLP	Solid	3010A	522375
500-175006-12	2615V2-01-B41 (40-45)	TCLP	Solid	3010A	522375
LB 500-522375/1-B	Method Blank	TCLP	Solid	3010A	522375
LCS 500-522553/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-175006-11 MS	2615V2-01-B41 (35-40)	TCLP	Solid	3010A	522375
500-175006-11 DU	2615V2-01-B41 (35-40)	TCLP	Solid	3010A	522375

Prep Batch: 522699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	TCLP	Solid	7470A	522375
500-175006-2	2615V2-01-B55 (5-10)	TCLP	Solid	7470A	522375
500-175006-3	2615V2-01-B55 (10-15)	TCLP	Solid	7470A	522375
500-175006-4	2615V2-01-B55 (15-23)	TCLP	Solid	7470A	522375
500-175006-5	2615V2-01-B55 (23-31)	TCLP	Solid	7470A	522375

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Metals (Continued)

Prep Batch: 522699 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-6	2615V2-01-B55 (23-31)D	TCLP	Solid	7470A	522375
500-175006-7	2615V2-01-B55 (31-39)	TCLP	Solid	7470A	522375
500-175006-8	2615V2-01-B55 (39-47)	TCLP	Solid	7470A	522375
500-175006-9	2615V2-01-B41 (0-4)	TCLP	Solid	7470A	522375
500-175006-10	2615V2-01-B41 (30-35)	TCLP	Solid	7470A	522375
500-175006-11	2615V2-01-B41 (35-40)	TCLP	Solid	7470A	522375
500-175006-12	2615V2-01-B41 (40-45)	TCLP	Solid	7470A	522375
LB 500-522375/1-C	Method Blank	TCLP	Solid	7470A	522375
MB 500-522699/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-522699/15-A	Lab Control Sample	Total/NA	Solid	7470A	
500-175006-2 MS	2615V2-01-B55 (5-10)	TCLP	Solid	7470A	522375
500-175006-2 DU	2615V2-01-B55 (5-10)	TCLP	Solid	7470A	522375

Analysis Batch: 522721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	TCLP	Solid	6010B	522553
500-175006-2	2615V2-01-B55 (5-10)	TCLP	Solid	6010B	522553
500-175006-3	2615V2-01-B55 (10-15)	TCLP	Solid	6010B	522553
500-175006-4	2615V2-01-B55 (15-23)	TCLP	Solid	6010B	522553
500-175006-5	2615V2-01-B55 (23-31)	TCLP	Solid	6010B	522553
500-175006-6	2615V2-01-B55 (23-31)D	TCLP	Solid	6010B	522553
500-175006-7	2615V2-01-B55 (31-39)	TCLP	Solid	6010B	522553
500-175006-8	2615V2-01-B55 (39-47)	TCLP	Solid	6010B	522553
500-175006-9	2615V2-01-B41 (0-4)	TCLP	Solid	6010B	522553
500-175006-10	2615V2-01-B41 (30-35)	TCLP	Solid	6010B	522553
500-175006-11	2615V2-01-B41 (35-40)	TCLP	Solid	6010B	522553
500-175006-12	2615V2-01-B41 (40-45)	TCLP	Solid	6010B	522553
LB 500-522375/1-B	Method Blank	TCLP	Solid	6010B	522553
LCS 500-522553/2-A	Lab Control Sample	Total/NA	Solid	6010B	522553
500-175006-11 MS	2615V2-01-B41 (35-40)	TCLP	Solid	6010B	522553
500-175006-11 DU	2615V2-01-B41 (35-40)	TCLP	Solid	6010B	522553

Analysis Batch: 522770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	TCLP	Solid	6020A	522553
500-175006-2	2615V2-01-B55 (5-10)	TCLP	Solid	6020A	522553
500-175006-3	2615V2-01-B55 (10-15)	TCLP	Solid	6020A	522553
500-175006-4	2615V2-01-B55 (15-23)	TCLP	Solid	6020A	522553
500-175006-5	2615V2-01-B55 (23-31)	TCLP	Solid	6020A	522553
500-175006-6	2615V2-01-B55 (23-31)D	TCLP	Solid	6020A	522553
500-175006-7	2615V2-01-B55 (31-39)	TCLP	Solid	6020A	522553
500-175006-8	2615V2-01-B55 (39-47)	TCLP	Solid	6020A	522553
500-175006-9	2615V2-01-B41 (0-4)	TCLP	Solid	6020A	522553
500-175006-10	2615V2-01-B41 (30-35)	TCLP	Solid	6020A	522553
500-175006-11	2615V2-01-B41 (35-40)	TCLP	Solid	6020A	522553
500-175006-12	2615V2-01-B41 (40-45)	TCLP	Solid	6020A	522553
LB 500-522375/1-B	Method Blank	TCLP	Solid	6020A	522553
LCS 500-522553/2-A	Lab Control Sample	Total/NA	Solid	6020A	522553
500-175006-11 MS	2615V2-01-B41 (35-40)	TCLP	Solid	6020A	522553
500-175006-11 DU	2615V2-01-B41 (35-40)	TCLP	Solid	6020A	522553

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Metals

Analysis Batch: 522936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	SPLP East	Solid	6010B	522551
500-175006-2	2615V2-01-B55 (5-10)	SPLP East	Solid	6010B	522551
500-175006-3	2615V2-01-B55 (10-15)	SPLP East	Solid	6010B	522551
500-175006-4	2615V2-01-B55 (15-23)	SPLP East	Solid	6010B	522551
500-175006-5	2615V2-01-B55 (23-31)	SPLP East	Solid	6010B	522551
500-175006-6	2615V2-01-B55 (23-31)D	SPLP East	Solid	6010B	522551
500-175006-7	2615V2-01-B55 (31-39)	SPLP East	Solid	6010B	522551
500-175006-8	2615V2-01-B55 (39-47)	SPLP East	Solid	6010B	522551
500-175006-9	2615V2-01-B41 (0-4)	SPLP East	Solid	6010B	522551
500-175006-10	2615V2-01-B41 (30-35)	SPLP East	Solid	6010B	522551
500-175006-11	2615V2-01-B41 (35-40)	SPLP East	Solid	6010B	522551
500-175006-12	2615V2-01-B41 (40-45)	SPLP East	Solid	6010B	522551
LB 500-522372/1-B	Method Blank	SPLP East	Solid	6010B	522551
LCS 500-522551/2-A	Lab Control Sample	Total/NA	Solid	6010B	522551
500-175006-12 MS	2615V2-01-B41 (40-45)	SPLP East	Solid	6010B	522551
500-175006-12 DU	2615V2-01-B41 (40-45)	SPLP East	Solid	6010B	522551

Analysis Batch: 523072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	TCLP	Solid	7470A	522699
500-175006-2	2615V2-01-B55 (5-10)	TCLP	Solid	7470A	522699
500-175006-3	2615V2-01-B55 (10-15)	TCLP	Solid	7470A	522699
500-175006-4	2615V2-01-B55 (15-23)	TCLP	Solid	7470A	522699
500-175006-5	2615V2-01-B55 (23-31)	TCLP	Solid	7470A	522699
500-175006-6	2615V2-01-B55 (23-31)D	TCLP	Solid	7470A	522699
500-175006-7	2615V2-01-B55 (31-39)	TCLP	Solid	7470A	522699
500-175006-8	2615V2-01-B55 (39-47)	TCLP	Solid	7470A	522699
500-175006-9	2615V2-01-B41 (0-4)	TCLP	Solid	7470A	522699
500-175006-10	2615V2-01-B41 (30-35)	TCLP	Solid	7470A	522699
500-175006-11	2615V2-01-B41 (35-40)	TCLP	Solid	7470A	522699
500-175006-12	2615V2-01-B41 (40-45)	TCLP	Solid	7470A	522699
LB 500-522375/1-C	Method Blank	TCLP	Solid	7470A	522699
MB 500-522699/12-A	Method Blank	Total/NA	Solid	7470A	522699
LCS 500-522699/15-A	Lab Control Sample	Total/NA	Solid	7470A	522699
500-175006-2 MS	2615V2-01-B55 (5-10)	TCLP	Solid	7470A	522699
500-175006-2 DU	2615V2-01-B55 (5-10)	TCLP	Solid	7470A	522699

General Chemistry

Analysis Batch: 521313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	Moisture	
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	Moisture	
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	Moisture	
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	Moisture	
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	Moisture	
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	Moisture	
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	Moisture	
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	Moisture	
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	Moisture	
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	Moisture	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

General Chemistry (Continued)

Analysis Batch: 521313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	Moisture	
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	Moisture	
500-175006-8 DU	2615V2-01-B55 (39-47)	Total/NA	Solid	Moisture	

Analysis Batch: 521496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175006-1	2615V2-01-B55 (0-5)	Total/NA	Solid	9045D	
500-175006-2	2615V2-01-B55 (5-10)	Total/NA	Solid	9045D	
500-175006-3	2615V2-01-B55 (10-15)	Total/NA	Solid	9045D	
500-175006-4	2615V2-01-B55 (15-23)	Total/NA	Solid	9045D	
500-175006-5	2615V2-01-B55 (23-31)	Total/NA	Solid	9045D	
500-175006-6	2615V2-01-B55 (23-31)D	Total/NA	Solid	9045D	
500-175006-7	2615V2-01-B55 (31-39)	Total/NA	Solid	9045D	
500-175006-8	2615V2-01-B55 (39-47)	Total/NA	Solid	9045D	
500-175006-9	2615V2-01-B41 (0-4)	Total/NA	Solid	9045D	
500-175006-10	2615V2-01-B41 (30-35)	Total/NA	Solid	9045D	
500-175006-11	2615V2-01-B41 (35-40)	Total/NA	Solid	9045D	
500-175006-12	2615V2-01-B41 (40-45)	Total/NA	Solid	9045D	
LCS 500-521496/5	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-521496/6	Lab Control Sample Dup	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-175006-1	2615V2-01-B55 (0-5)	94	93	91	92
500-175006-2	2615V2-01-B55 (5-10)	96	90	93	93
500-175006-3	2615V2-01-B55 (10-15)	94	90	93	93
500-175006-4	2615V2-01-B55 (15-23)	96	90	93	92
500-175006-5	2615V2-01-B55 (23-31)	95	100	93	93
500-175006-6	2615V2-01-B55 (23-31)D	96	94	92	94
500-175006-7	2615V2-01-B55 (31-39)	92	114	92	99
500-175006-8	2615V2-01-B55 (39-47)	96	94	94	95
500-175006-9	2615V2-01-B41 (0-4)	96	84	91	93
500-175006-10	2615V2-01-B41 (30-35)	96	98	91	94
500-175006-11	2615V2-01-B41 (35-40)	101	100	93	93
500-175006-12	2615V2-01-B41 (40-45)	92	94	87	94
LCS 500-522235/4	Lab Control Sample	88	83	91	94
LCS 500-522395/28	Lab Control Sample	89	88	89	89
LCSD 500-522235/7	Lab Control Sample Dup	89	87	88	93
MB 500-522235/6	Method Blank	89	87	89	92
MB 500-522395/6	Method Blank	85	88	85	85

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-175006-1	2615V2-01-B55 (0-5)	116	104	85	93	64	209 X
500-175006-2	2615V2-01-B55 (5-10)	127	104	90	102	61	163 X
500-175006-3	2615V2-01-B55 (10-15)	108	104	85	99	52	171 X
500-175006-4	2615V2-01-B55 (15-23)	101	57	41	68	67	137
500-175006-5	2615V2-01-B55 (23-31)	100	88	80	86	44	129
500-175006-6	2615V2-01-B55 (23-31)D	103	98	82	87	53	139
500-175006-7	2615V2-01-B55 (31-39)	116	106	98	104	64	173 X
500-175006-8	2615V2-01-B55 (39-47)	106	100	87	100	61	168 X
500-175006-9	2615V2-01-B41 (0-4)	113	106	80	93	74	137
500-175006-9 - DL	2615V2-01-B41 (0-4)	124	130	84	79	86	108
500-175006-10	2615V2-01-B41 (30-35)	93	88	69	76	59	130
500-175006-11	2615V2-01-B41 (35-40)	131	111	96	97	56	143
500-175006-12	2615V2-01-B41 (40-45)	129	114	96	105	48	150
LCS 500-521794/2-A	Lab Control Sample	123	105	96	88	103	106
MB 500-521794/1-A	Method Blank	129	109	90	84	60	108

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl

Eurofins TestAmerica, Chicago

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Job ID: 500-175006-1

- 1
- 2
- 3
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- 14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-522235/6
Matrix: Solid
Analysis Batch: 522235

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/24/19 08:53	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/24/19 08:53	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/24/19 08:53	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/24/19 08:53	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/24/19 08:53	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/24/19 08:53	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/24/19 08:53	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/24/19 08:53	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/24/19 08:53	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/24/19 08:53	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/24/19 08:53	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/24/19 08:53	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/24/19 08:53	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/24/19 08:53	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/24/19 08:53	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/24/19 08:53	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/24/19 08:53	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/24/19 08:53	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/24/19 08:53	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/24/19 08:53	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/24/19 08:53	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/24/19 08:53	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/24/19 08:53	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/24/19 08:53	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/24/19 08:53	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/24/19 08:53	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/24/19 08:53	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/24/19 08:53	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/24/19 08:53	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/24/19 08:53	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/24/19 08:53	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/24/19 08:53	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/24/19 08:53	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/24/19 08:53	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/24/19 08:53	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/24/19 08:53	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/24/19 08:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134		12/24/19 08:53	1
4-Bromofluorobenzene (Surr)	87		75 - 131		12/24/19 08:53	1
Dibromofluoromethane	89		75 - 126		12/24/19 08:53	1
Toluene-d8 (Surr)	92		75 - 124		12/24/19 08:53	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-522235/4

Matrix: Solid

Analysis Batch: 522235

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0409		mg/Kg		82	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0380		mg/Kg		76	70 - 122
1,1,2-Trichloroethane	0.0500	0.0404		mg/Kg		81	70 - 125
1,1-Dichloroethane	0.0500	0.0483		mg/Kg		97	70 - 125
1,1-Dichloroethene	0.0500	0.0436		mg/Kg		87	70 - 120
1,2-Dichloroethane	0.0500	0.0456		mg/Kg		91	70 - 130
1,2-Dichloropropane	0.0500	0.0482		mg/Kg		96	70 - 125
2-Butanone (MEK)	0.0500	0.0448		mg/Kg		90	47 - 138
2-Hexanone	0.0500	0.0488		mg/Kg		98	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0477		mg/Kg		95	50 - 148
Acetone	0.0500	0.0427		mg/Kg		85	40 - 150
Benzene	0.0500	0.0440		mg/Kg		88	70 - 125
Bromodichloromethane	0.0500	0.0391		mg/Kg		78	67 - 129
Bromoform	0.0500	0.0380		mg/Kg		76	68 - 136
Bromomethane	0.0500	0.0396		mg/Kg		79	70 - 130
Carbon disulfide	0.0500	0.0426		mg/Kg		85	70 - 129
Carbon tetrachloride	0.0500	0.0422		mg/Kg		84	75 - 125
Chlorobenzene	0.0500	0.0442		mg/Kg		88	50 - 150
Chloroethane	0.0500	0.0519		mg/Kg		104	75 - 125
Chloroform	0.0500	0.0407		mg/Kg		81	57 - 135
Chloromethane	0.0500	0.0452		mg/Kg		90	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0432		mg/Kg		86	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0411		mg/Kg		82	70 - 125
Dibromochloromethane	0.0500	0.0381		mg/Kg		76	69 - 125
Ethylbenzene	0.0500	0.0442		mg/Kg		88	61 - 136
Methyl tert-butyl ether	0.0500	0.0434		mg/Kg		87	50 - 140
Methylene Chloride	0.0500	0.0427		mg/Kg		85	70 - 126
Styrene	0.0500	0.0415		mg/Kg		83	70 - 125
Tetrachloroethene	0.0500	0.0462		mg/Kg		92	70 - 124
Toluene	0.0500	0.0428		mg/Kg		86	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0435		mg/Kg		87	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0386		mg/Kg		77	70 - 125
Trichloroethene	0.0500	0.0448		mg/Kg		90	70 - 125
Vinyl acetate	0.0500	0.0424		mg/Kg		85	40 - 153
Vinyl chloride	0.0500	0.0426		mg/Kg		85	70 - 125
Xylenes, Total	0.100	0.0843		mg/Kg		84	53 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	88		70 - 134
4-Bromofluorobenzene (Surr)	83		75 - 131
Dibromofluoromethane	91		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-522235/7
Matrix: Solid
Analysis Batch: 522235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0406		mg/Kg		81	70 - 128	1	30
1,1,2,2-Tetrachloroethane	0.0500	0.0401		mg/Kg		80	70 - 122	5	30
1,1,2-Trichloroethane	0.0500	0.0425		mg/Kg		85	70 - 125	5	30
1,1-Dichloroethane	0.0500	0.0483		mg/Kg		97	70 - 125	0	30
1,1-Dichloroethene	0.0500	0.0430		mg/Kg		86	70 - 120	1	30
1,2-Dichloroethane	0.0500	0.0480		mg/Kg		96	70 - 130	5	30
1,2-Dichloropropane	0.0500	0.0505		mg/Kg		101	70 - 125	5	30
2-Butanone (MEK)	0.0500	0.0458		mg/Kg		92	47 - 138	2	30
2-Hexanone	0.0500	0.0501		mg/Kg		100	48 - 146	3	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0483		mg/Kg		97	50 - 148	1	30
Acetone	0.0500	0.0400		mg/Kg		80	40 - 150	7	30
Benzene	0.0500	0.0450		mg/Kg		90	70 - 125	2	30
Bromodichloromethane	0.0500	0.0405		mg/Kg		81	67 - 129	4	30
Bromoform	0.0500	0.0389		mg/Kg		78	68 - 136	2	30
Bromomethane	0.0500	0.0401		mg/Kg		80	70 - 130	1	30
Carbon disulfide	0.0500	0.0419		mg/Kg		84	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0419		mg/Kg		84	75 - 125	1	30
Chlorobenzene	0.0500	0.0462		mg/Kg		92	50 - 150	4	30
Chloroethane	0.0500	0.0555		mg/Kg		111	75 - 125	7	30
Chloroform	0.0500	0.0411		mg/Kg		82	57 - 135	1	30
Chloromethane	0.0500	0.0477		mg/Kg		95	70 - 125	5	30
cis-1,2-Dichloroethene	0.0500	0.0434		mg/Kg		87	70 - 125	0	30
cis-1,3-Dichloropropene	0.0500	0.0436		mg/Kg		87	70 - 125	6	30
Dibromochloromethane	0.0500	0.0395		mg/Kg		79	69 - 125	4	30
Ethylbenzene	0.0500	0.0449		mg/Kg		90	61 - 136	1	30
Methyl tert-butyl ether	0.0500	0.0421		mg/Kg		84	50 - 140	3	30
Methylene Chloride	0.0500	0.0420		mg/Kg		84	70 - 126	2	30
Styrene	0.0500	0.0434		mg/Kg		87	70 - 125	5	30
Tetrachloroethene	0.0500	0.0468		mg/Kg		94	70 - 124	1	30
Toluene	0.0500	0.0442		mg/Kg		88	70 - 125	3	30
trans-1,2-Dichloroethene	0.0500	0.0428		mg/Kg		86	70 - 125	2	30
trans-1,3-Dichloropropene	0.0500	0.0417		mg/Kg		83	70 - 125	8	30
Trichloroethene	0.0500	0.0455		mg/Kg		91	70 - 125	2	30
Vinyl acetate	0.0500	0.0455		mg/Kg		91	40 - 153	7	30
Vinyl chloride	0.0500	0.0445		mg/Kg		89	70 - 125	4	30
Xylenes, Total	0.100	0.0851		mg/Kg		85	53 - 147	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
4-Bromofluorobenzene (Surr)	87		75 - 131
Dibromofluoromethane	88		75 - 126
Toluene-d8 (Surr)	93		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-522395/6
Matrix: Solid
Analysis Batch: 522395

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/26/19 09:06	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/26/19 09:06	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/26/19 09:06	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/26/19 09:06	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/26/19 09:06	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/26/19 09:06	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/26/19 09:06	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/26/19 09:06	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/26/19 09:06	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/26/19 09:06	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/26/19 09:06	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/26/19 09:06	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/26/19 09:06	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/26/19 09:06	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/26/19 09:06	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/26/19 09:06	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/26/19 09:06	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/26/19 09:06	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/26/19 09:06	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/26/19 09:06	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/26/19 09:06	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/26/19 09:06	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/26/19 09:06	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/26/19 09:06	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/26/19 09:06	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/26/19 09:06	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/26/19 09:06	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/26/19 09:06	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/26/19 09:06	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/26/19 09:06	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/26/19 09:06	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/26/19 09:06	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/26/19 09:06	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/26/19 09:06	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/26/19 09:06	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/26/19 09:06	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/26/19 09:06	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	85		70 - 134		12/26/19 09:06	1
4-Bromofluorobenzene (Surr)	88		75 - 131		12/26/19 09:06	1
Dibromofluoromethane	85		75 - 126		12/26/19 09:06	1
Toluene-d8 (Surr)	85		75 - 124		12/26/19 09:06	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-522395/28

Matrix: Solid

Analysis Batch: 522395

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0378		mg/Kg		76	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0389		mg/Kg		78	70 - 122
1,1,2-Trichloroethane	0.0500	0.0405		mg/Kg		81	70 - 125
1,1-Dichloroethane	0.0500	0.0442		mg/Kg		88	70 - 125
1,1-Dichloroethene	0.0500	0.0402		mg/Kg		80	70 - 120
1,2-Dichloroethane	0.0500	0.0443		mg/Kg		89	70 - 130
1,2-Dichloropropane	0.0500	0.0446		mg/Kg		89	70 - 125
2-Butanone (MEK)	0.0500	0.0567		mg/Kg		113	47 - 138
2-Hexanone	0.0500	0.0565		mg/Kg		113	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0503		mg/Kg		101	50 - 148
Acetone	0.0500	0.0547		mg/Kg		109	40 - 150
Benzene	0.0500	0.0420		mg/Kg		84	70 - 125
Bromodichloromethane	0.0500	0.0370		mg/Kg		74	67 - 129
Bromoform	0.0500	0.0373		mg/Kg		75	68 - 136
Bromomethane	0.0500	0.0361		mg/Kg		72	70 - 130
Carbon disulfide	0.0500	0.0386		mg/Kg		77	70 - 129
Carbon tetrachloride	0.0500	0.0393		mg/Kg		79	75 - 125
Chlorobenzene	0.0500	0.0422		mg/Kg		84	50 - 150
Chloroethane	0.0500	0.0503		mg/Kg		101	75 - 125
Chloroform	0.0500	0.0384		mg/Kg		77	57 - 135
Chloromethane	0.0500	0.0453		mg/Kg		91	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0395		mg/Kg		79	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0377		mg/Kg		75	70 - 125
Dibromochloromethane	0.0500	0.0378		mg/Kg		76	69 - 125
Ethylbenzene	0.0500	0.0407		mg/Kg		81	61 - 136
Methyl tert-butyl ether	0.0500	0.0401		mg/Kg		80	50 - 140
Methylene Chloride	0.0500	0.0390		mg/Kg		78	70 - 126
Styrene	0.0500	0.0395		mg/Kg		79	70 - 125
Tetrachloroethene	0.0500	0.0437		mg/Kg		87	70 - 124
Toluene	0.0500	0.0391		mg/Kg		78	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0391		mg/Kg		78	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0394		mg/Kg		79	70 - 125
Trichloroethene	0.0500	0.0424		mg/Kg		85	70 - 125
Vinyl acetate	0.0500	0.0409		mg/Kg		82	40 - 153
Vinyl chloride	0.0500	0.0412		mg/Kg		82	70 - 125
Xylenes, Total	0.100	0.0767		mg/Kg		77	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 134
4-Bromofluorobenzene (Surr)	88		75 - 131
Dibromofluoromethane	89		75 - 126
Toluene-d8 (Surr)	89		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521794/1-A
Matrix: Solid
Analysis Batch: 522280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521794

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/20/19 15:54	12/24/19 18:08	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521794/1-A
Matrix: Solid
Analysis Batch: 522280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/20/19 15:54	12/24/19 18:08	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/20/19 15:54	12/24/19 18:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	129		31 - 166	12/20/19 15:54	12/24/19 18:08	1
Phenol-d5	109		30 - 153	12/20/19 15:54	12/24/19 18:08	1
Nitrobenzene-d5	90		37 - 147	12/20/19 15:54	12/24/19 18:08	1
2-Fluorobiphenyl	84		43 - 145	12/20/19 15:54	12/24/19 18:08	1
2,4,6-Tribromophenol	60		31 - 143	12/20/19 15:54	12/24/19 18:08	1
Terphenyl-d14	108		42 - 157	12/20/19 15:54	12/24/19 18:08	1

Lab Sample ID: LCS 500-521794/2-A
Matrix: Solid
Analysis Batch: 522280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	1.33	1.63		mg/Kg		122	56 - 122
Bis(2-chloroethyl)ether	1.33	1.20		mg/Kg		90	55 - 111
1,3-Dichlorobenzene	1.33	1.23		mg/Kg		92	65 - 124
1,4-Dichlorobenzene	1.33	1.23		mg/Kg		92	61 - 110
1,2-Dichlorobenzene	1.33	1.28		mg/Kg		96	62 - 110
2-Methylphenol	1.33	1.36		mg/Kg		102	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.16		mg/Kg		87	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.32		mg/Kg		99	56 - 118
Hexachloroethane	1.33	1.19		mg/Kg		89	60 - 114
2-Chlorophenol	1.33	1.39		mg/Kg		104	64 - 110
Nitrobenzene	1.33	1.38		mg/Kg		103	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.29		mg/Kg		97	60 - 112
1,2,4-Trichlorobenzene	1.33	1.34		mg/Kg		101	66 - 117
Isophorone	1.33	1.26		mg/Kg		94	55 - 110
2,4-Dimethylphenol	1.33	1.49	*	mg/Kg		112	60 - 110
Hexachlorobutadiene	1.33	1.41		mg/Kg		105	56 - 120
Naphthalene	1.33	1.32		mg/Kg		99	63 - 110
2,4-Dichlorophenol	1.33	1.34		mg/Kg		101	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521794/2-A

Matrix: Solid

Analysis Batch: 522280

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 521794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.24		mg/Kg		93	30 - 150
2,4,6-Trichlorophenol	1.33	1.40		mg/Kg		105	57 - 120
2,4,5-Trichlorophenol	1.33	1.28		mg/Kg		96	50 - 120
Hexachlorocyclopentadiene	1.33	0.530	J	mg/Kg		40	10 - 133
2-Methylnaphthalene	1.33	1.39		mg/Kg		104	69 - 112
2-Nitroaniline	1.33	1.35		mg/Kg		101	57 - 124
2-Chloronaphthalene	1.33	1.30		mg/Kg		97	69 - 114
4-Chloro-3-methylphenol	1.33	1.49		mg/Kg		112	65 - 122
2,6-Dinitrotoluene	1.33	1.36		mg/Kg		102	70 - 123
2-Nitrophenol	1.33	1.30		mg/Kg		98	60 - 120
3-Nitroaniline	1.33	1.14		mg/Kg		85	40 - 122
Dimethyl phthalate	1.33	1.31		mg/Kg		98	69 - 116
2,4-Dinitrophenol	2.67	0.741		mg/Kg		28	10 - 100
Acenaphthylene	1.33	1.30		mg/Kg		98	68 - 120
2,4-Dinitrotoluene	1.33	1.43		mg/Kg		107	69 - 124
Acenaphthene	1.33	1.29		mg/Kg		97	65 - 124
Dibenzofuran	1.33	1.29		mg/Kg		96	66 - 115
4-Nitrophenol	2.67	3.27	*	mg/Kg		123	30 - 122
Fluorene	1.33	1.30		mg/Kg		98	62 - 120
4-Nitroaniline	1.33	1.31		mg/Kg		98	60 - 160
4-Bromophenyl phenyl ether	1.33	1.36		mg/Kg		102	68 - 118
Hexachlorobenzene	1.33	1.40		mg/Kg		105	63 - 124
Diethyl phthalate	1.33	1.34		mg/Kg		100	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.31		mg/Kg		98	62 - 119
Pentachlorophenol	2.67	1.80		mg/Kg		67	13 - 112
N-Nitrosodiphenylamine	1.33	1.35		mg/Kg		101	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.11		mg/Kg		42	10 - 110
Phenanthrene	1.33	1.31		mg/Kg		98	62 - 120
Anthracene	1.33	1.29		mg/Kg		97	70 - 114
Carbazole	1.33	1.44		mg/Kg		108	65 - 142
Di-n-butyl phthalate	1.33	1.34		mg/Kg		100	65 - 120
Fluoranthene	1.33	1.38		mg/Kg		103	62 - 120
Pyrene	1.33	1.38		mg/Kg		104	61 - 128
Butyl benzyl phthalate	1.33	1.37		mg/Kg		103	71 - 129
Benzo[a]anthracene	1.33	1.41		mg/Kg		106	67 - 122
Chrysene	1.33	1.32		mg/Kg		99	63 - 120
3,3'-Dichlorobenzidine	1.33	1.21		mg/Kg		91	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.38		mg/Kg		103	72 - 131
Di-n-octyl phthalate	1.33	1.40		mg/Kg		105	68 - 134
Benzo[b]fluoranthene	1.33	1.37		mg/Kg		103	69 - 129
Benzo[k]fluoranthene	1.33	1.32		mg/Kg		99	68 - 127
Benzo[a]pyrene	1.33	1.37		mg/Kg		103	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.20		mg/Kg		90	68 - 130
Dibenz(a,h)anthracene	1.33	1.22		mg/Kg		91	64 - 131
Benzo[g,h,i]perylene	1.33	1.17		mg/Kg		88	72 - 131
3 & 4 Methylphenol	1.33	1.38		mg/Kg		104	57 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521794/2-A
Matrix: Solid
Analysis Batch: 522280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521794

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	123		31 - 166
Phenol-d5	105		30 - 153
Nitrobenzene-d5	96		37 - 147
2-Fluorobiphenyl	88		43 - 145
2,4,6-Tribromophenol	103		31 - 143
Terphenyl-d14	106		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-521387/1-A
Matrix: Solid
Analysis Batch: 521634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521387

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Barium	<1.0		1.0	0.11	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Boron	0.516	J	5.0	0.47	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Cadmium	0.0424	J	0.20	0.036	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Calcium	<20		20	3.4	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Copper	<1.0		1.0	0.28	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Iron	11.6	J	20	10	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Lead	<0.50		0.50	0.23	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Magnesium	<10		10	5.0	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Potassium	<50		50	18	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Silver	<0.50		0.50	0.13	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Sodium	<100		100	15	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/18/19 18:04	12/19/19 16:52	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/18/19 18:04	12/19/19 16:52	1

Lab Sample ID: LCS 500-521387/2-A
Matrix: Solid
Analysis Batch: 521634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521387

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	50.0	48.7		mg/Kg		97	80 - 120
Arsenic	10.0	9.47		mg/Kg		95	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	5.00	4.71		mg/Kg		94	80 - 120
Boron	100	88.0		mg/Kg		88	80 - 120
Cadmium	5.00	4.69		mg/Kg		94	80 - 120
Calcium	1000	934		mg/Kg		93	80 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-521387/2-A
Matrix: Solid
Analysis Batch: 521634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521387
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chromium	20.0	18.9		mg/Kg		94	80 - 120
Cobalt	50.0	48.6		mg/Kg		97	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Iron	100	112		mg/Kg		112	80 - 120
Lead	10.0	9.22		mg/Kg		92	80 - 120
Magnesium	1000	901		mg/Kg		90	80 - 120
Manganese	50.0	47.4		mg/Kg		95	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Potassium	1000	944		mg/Kg		94	80 - 120
Selenium	10.0	8.57		mg/Kg		86	80 - 120
Silver	5.00	4.51		mg/Kg		90	80 - 120
Sodium	1000	972		mg/Kg		97	80 - 120
Thallium	10.0	9.46		mg/Kg		95	80 - 120
Vanadium	50.0	47.1		mg/Kg		94	80 - 120
Zinc	50.0	47.7		mg/Kg		95	80 - 120

Lab Sample ID: LCS 500-522551/2-A
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522551
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Manganese	0.500	0.502		mg/L		100	80 - 120

Lab Sample ID: LCS 500-522553/2-A
Matrix: Solid
Analysis Batch: 522721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522553
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	0.500	0.494	J	mg/L		99	80 - 120
Beryllium	0.0500	0.0498		mg/L		100	80 - 120
Boron	1.00	0.989		mg/L		99	80 - 120
Cadmium	0.0500	0.0540		mg/L		108	80 - 120
Chromium	0.200	0.194		mg/L		97	80 - 120
Cobalt	0.500	0.513		mg/L		103	80 - 120
Iron	1.00	1.05		mg/L		105	80 - 120
Lead	0.100	0.0976		mg/L		98	80 - 120
Manganese	0.500	0.483		mg/L		97	80 - 120
Nickel	0.500	0.510		mg/L		102	80 - 120
Selenium	0.100	0.117		mg/L		117	80 - 120
Silver	0.0500	0.0521		mg/L		104	80 - 120
Zinc	0.500	0.547		mg/L		109	80 - 120

Lab Sample ID: LB 500-522375/1-B
Matrix: Solid
Analysis Batch: 522721

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522553

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 08:57	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/26/19 15:21	12/27/19 08:57	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-522375/1-B
Matrix: Solid
Analysis Batch: 522721

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522553

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.50		0.50	0.050	mg/L		12/26/19 15:21	12/27/19 08:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/26/19 15:21	12/27/19 08:57	1
Chromium	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 08:57	1
Cobalt	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 08:57	1
Iron	<0.40		0.40	0.20	mg/L		12/26/19 15:21	12/27/19 08:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/26/19 15:21	12/27/19 08:57	1
Manganese	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 08:57	1
Nickel	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 08:57	1
Selenium	<0.050		0.050	0.020	mg/L		12/26/19 15:21	12/27/19 08:57	1
Silver	<0.025		0.025	0.010	mg/L		12/26/19 15:21	12/27/19 08:57	1
Zinc	<0.50		0.50	0.020	mg/L		12/26/19 15:21	12/27/19 08:57	1

Lab Sample ID: 500-175006-11 MS
Matrix: Solid
Analysis Batch: 522721

Client Sample ID: 2615V2-01-B41 (35-40)
Prep Type: TCLP
Prep Batch: 522553

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.58		0.500	1.08		mg/L		101	75 - 125
Beryllium	<0.0040		0.0500	0.0492		mg/L		98	75 - 125
Boron	0.11	J	1.00	0.993		mg/L		88	75 - 125
Cadmium	<0.0050		0.0500	0.0493		mg/L		99	75 - 125
Chromium	<0.025		0.200	0.183		mg/L		92	75 - 125
Cobalt	0.016	J	0.500	0.481		mg/L		93	75 - 125
Iron	<0.40		1.00	1.01		mg/L		101	75 - 125
Lead	<0.0075		0.100	0.0916		mg/L		92	75 - 125
Manganese	1.9		0.500	2.46		mg/L		110	75 - 125
Nickel	0.046		0.500	0.517		mg/L		94	75 - 125
Selenium	<0.050		0.100	0.100		mg/L		100	75 - 125
Silver	<0.025		0.0500	0.0539		mg/L		108	75 - 125
Zinc	0.038	J	0.500	0.522		mg/L		97	75 - 125

Lab Sample ID: 500-175006-11 DU
Matrix: Solid
Analysis Batch: 522721

Client Sample ID: 2615V2-01-B41 (35-40)
Prep Type: TCLP
Prep Batch: 522553

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	0.58		0.570		mg/L		1	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.11	J	0.111	J	mg/L		2	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.016	J	0.0160	J	mg/L		0.4	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	1.9		1.89		mg/L		1	20
Nickel	0.046		0.0446		mg/L		3	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20
Zinc	0.038	J	0.0379	J	mg/L		0.8	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-522372/1-B
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 522551

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		12/26/19 15:17	12/28/19 01:33	1

Lab Sample ID: 500-175006-12 MS
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: 2615V2-01-B41 (40-45)
Prep Type: SPLP East
Prep Batch: 522551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Manganese	0.044		0.500	0.552		mg/L		102	75 - 125

Lab Sample ID: 500-175006-12 DU
Matrix: Solid
Analysis Batch: 522936

Client Sample ID: 2615V2-01-B41 (40-45)
Prep Type: SPLP East
Prep Batch: 522551

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Manganese	0.044		0.0454		mg/L		3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-522553/2-A
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522553

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.505		mg/L		101	80 - 120
Thallium	0.100	0.0991		mg/L		99	80 - 120

Lab Sample ID: LB 500-522375/1-B
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522553

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/26/19 15:21	12/27/19 12:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/26/19 15:21	12/27/19 12:10	1

Lab Sample ID: 500-175006-11 MS
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: 2615V2-01-B41 (35-40)
Prep Type: TCLP
Prep Batch: 522553

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.501		mg/L		100	75 - 125
Thallium	<0.0020		0.100	0.0980		mg/L		98	75 - 125

Lab Sample ID: 500-175006-11 DU
Matrix: Solid
Analysis Batch: 522770

Client Sample ID: 2615V2-01-B41 (35-40)
Prep Type: TCLP
Prep Batch: 522553

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-522699/12-A
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 07:46	1

Lab Sample ID: LCS 500-522699/15-A
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522699
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00219		mg/L		110	80 - 120

Lab Sample ID: LB 500-522375/1-C
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522699

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/27/19 09:45	12/30/19 07:49	1

Lab Sample ID: 500-175006-2 MS
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: 2615V2-01-B55 (5-10)
Prep Type: TCLP
Prep Batch: 522699
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00109		mg/L		109	75 - 125

Lab Sample ID: 500-175006-2 DU
Matrix: Solid
Analysis Batch: 523072

Client Sample ID: 2615V2-01-B55 (5-10)
Prep Type: TCLP
Prep Batch: 522699

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-521768/12-A
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/20/19 14:05	12/23/19 10:19	1

Lab Sample ID: LCS 500-521768/13-A
Matrix: Solid
Analysis Batch: 522162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521768
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.160		mg/Kg		96	80 - 120

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 500-175006-10 MS

Matrix: Solid

Analysis Batch: 522162

Client Sample ID: 2615V2-01-B41 (30-35)

Prep Type: Total/NA

Prep Batch: 521768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.015	J	0.0995	0.107		mg/Kg	☼	92	75 - 125

Lab Sample ID: 500-175006-10 MSD

Matrix: Solid

Analysis Batch: 522162

Client Sample ID: 2615V2-01-B41 (30-35)

Prep Type: Total/NA

Prep Batch: 521768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.015	J	0.0994	0.106		mg/Kg	☼	91	75 - 125	1	20

Lab Sample ID: 500-175006-10 DU

Matrix: Solid

Analysis Batch: 522162

Client Sample ID: 2615V2-01-B41 (30-35)

Prep Type: Total/NA

Prep Batch: 521768

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.015	J	0.0149	J	mg/Kg	☼	4	20

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Date Collected: 12/12/19 08:20

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:17	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 09:36	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:29	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 08:42	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 11:23		
					(End)	12/19/19 11:27		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (0-5)

Lab Sample ID: 500-175006-1

Date Collected: 12/12/19 08:20

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 10:10	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 17:10	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:28	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 12:34	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:24	MJG	TAL CHI

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:22	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 09:49	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:35	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 08:43	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 11:27		
					(End)	12/19/19 11:32		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (5-10)

Lab Sample ID: 500-175006-2

Date Collected: 12/12/19 08:25

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 10:36	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522744	12/27/19 19:56	NRJ	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:32	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 12:38	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:26	MJG	TAL CHI

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:34	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 09:54	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:38	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 08:48	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (10-15)

Lab Sample ID: 500-175006-3

Date Collected: 12/12/19 08:35

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 11:02	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522744	12/27/19 20:24	NRJ	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:36	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 12:43	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:28	MJG	TAL CHI

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Date Collected: 12/12/19 08:45

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:38	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 09:58	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:40	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 08:50	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 11:40		
					(End)	12/19/19 11:44		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (15-23)

Lab Sample ID: 500-175006-4

Date Collected: 12/12/19 08:45

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 11:27	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522744	12/27/19 20:53	NRJ	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:40	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 12:47	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:34	MJG	TAL CHI

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:42	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:02	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:42	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 08:52	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496	(Start) 12/19/19 11:44 (End) 12/19/19 11:49	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 11:53	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 09:29	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:44	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (23-31)

Lab Sample ID: 500-175006-5

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 12:51	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:36	MJG	TAL CHI

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:46	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:07	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:44	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 08:53	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 11:49		
					(End)	12/19/19 11:53		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (23-31)D

Lab Sample ID: 500-175006-6

Date Collected: 12/12/19 08:50

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 12:19	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 09:58	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:48	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 12:55	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:38	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Date Collected: 12/12/19 09:00

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:50	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:11	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:46	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:19	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 11:53		
					(End)	12/19/19 11:57		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (31-39)

Lab Sample ID: 500-175006-7

Date Collected: 12/12/19 09:00

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 12:45	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 13:19	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:52	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 13:00	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:41	MJG	TAL CHI

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:54	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:16	EEN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:48	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:20	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 11:57		
					(End)	12/19/19 12:01		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B55 (39-47)

Lab Sample ID: 500-175006-8

Date Collected: 12/12/19 09:15

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 13:11	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 13:49	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 17:56	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 13:04	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:43	MJG	TAL CHI

Client Sample ID: 2615V2-01-B41 (0-4)

Lab Sample ID: 500-175006-9

Date Collected: 12/12/19 10:10

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 02:58	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:20	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:50	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:22	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B41 (0-4)

Lab Sample ID: 500-175006-9

Date Collected: 12/12/19 10:10

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B41 (0-4)

Lab Sample ID: 500-175006-9

Date Collected: 12/12/19 10:10

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 13:37	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 14:18	AJD	TAL CHI
Total/NA	Prep	3541	DL		521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D	DL	5	522891	12/29/19 22:48	NRJ	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 18:08	JEF	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:45	MJG	TAL CHI

Client Sample ID: 2615V2-01-B41 (30-35)

Lab Sample ID: 500-175006-10

Date Collected: 12/12/19 11:10

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 03:02	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:24	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:52	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:23	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 12:06		
					(End)	12/19/19 12:10		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B41 (30-35)

Lab Sample ID: 500-175006-10

Date Collected: 12/12/19 11:10

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 14:03	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 10:27	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 18:12	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 13:17	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 10:47	MJG	TAL CHI

Client Sample ID: 2615V2-01-B41 (35-40)

Lab Sample ID: 500-175006-11

Date Collected: 12/12/19 11:30

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 03:06	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:29	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 12:59	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:25	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496	(Start) 12/19/19 12:10 (End) 12/19/19 12:14	MTB	TAL CHI
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B41 (35-40)

Lab Sample ID: 500-175006-11

Date Collected: 12/12/19 11:30

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 11:30	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522395	12/26/19 13:00	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 10:56	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 18:16	JEF	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Client Sample ID: 2615V2-01-B41 (35-40)

Lab Sample ID: 500-175006-11

Date Collected: 12/12/19 11:30

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 13:21	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 11:00	MJG	TAL CHI

Client Sample ID: 2615V2-01-B41 (40-45)

Lab Sample ID: 500-175006-12

Date Collected: 12/12/19 12:10

Matrix: Solid

Date Received: 12/12/19 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522372	12/24/19 12:15	BEC	TAL CHI
SPLP East	Prep	3010A			522551	12/26/19 15:17	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522936	12/28/19 03:10	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6010B		1	522721	12/27/19 10:55	EEN	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	3010A			522553	12/26/19 15:21	BDE	TAL CHI
TCLP	Analysis	6020A		1	522770	12/27/19 13:07	FXG	TAL CHI
TCLP	Leach	1311			522375	12/24/19 16:27	BEC	TAL CHI
TCLP	Prep	7470A			522699	12/27/19 09:45	MJG	TAL CHI
TCLP	Analysis	7470A		1	523072	12/30/19 09:26	MJG	TAL CHI
Total/NA	Analysis	9045D		1	521496		MTB	TAL CHI
					(Start)	12/19/19 12:14		
					(End)	12/19/19 12:18		
Total/NA	Analysis	Moisture		1	521313	12/18/19 14:03	LWN	TAL CHI

Client Sample ID: 2615V2-01-B41 (40-45)

Lab Sample ID: 500-175006-12

Date Collected: 12/12/19 12:10

Matrix: Solid

Date Received: 12/12/19 15:40

Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520673	12/12/19 18:40	WRE	TAL CHI
Total/NA	Analysis	8260B		1	522235	12/24/19 14:55	PMF	TAL CHI
Total/NA	Prep	3541			521794	12/20/19 15:54	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522820	12/28/19 11:24	AJD	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521634	12/19/19 18:20	JEF	TAL CHI
Total/NA	Prep	3050B			521387	12/18/19 18:04	BDE	TAL CHI
Total/NA	Analysis	6010B		10	522047	12/20/19 13:25	EEN	TAL CHI
Total/NA	Prep	7471B			521768	12/20/19 14:05	MJG	TAL CHI
Total/NA	Analysis	7471B		1	522162	12/23/19 11:02	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-175006-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534



500-175006 COC

Report To (optional)
Contact: Dean Tiebert
Company: E+E
Address: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

Bill To (optional)
Contact: Dean Tiebert
Company: E+E
Address: _____
Address: _____
Phone: _____
Fax: _____
PO#/Reference# _____

Chain of Custody Record

Lab Job #: 500-175006

Chain of Custody Number: _____

Page 1 of 2

Temperature °C of Cooler: 23.5.9

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
ED1		0945-028								
Project Name		Lab Project #		Date		Time		# of Containers		
IDOT 176-001 WO 47E										
Project Location/State		Lab Project #		Date		Time		# of Containers		Comments
Chicago, IL										
Sampler		Lab PM		Date		Time		# of Containers		
M. Fischer		Rich Wright								
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TCLP METALS
1		261502-01-B55(0-5)	12-12-19	0820	5	S	X	X	X	X
2		(5-10)		0825						
3		(10-15)		0835						
4		(15-23)		0845						
5		(23-31)		0850						
6		(23-31)D		0850						
7		(31-39)		0900						
8		(39-47)		0915						
9		-01-B41(0-4)		1010						
10		(30-35)		1110						

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other

Sample Disposal

Return to Client Disposal by Lab Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>M. Fischer</u> Company: <u>ED1</u> Date: <u>12/12/19</u> Time: <u>1425</u>	Received By: <u>J. Neal</u> Company: <u>TA</u> Date: <u>12/12/19</u> Time: <u>1425</u>
Relinquished By: <u>J. Neal</u> Company: <u>TA</u> Date: <u>12/12/19</u> Time: <u>1540</u>	Received By: <u>Shirley Scott</u> Company: <u>TA-CHE</u> Date: <u>12/12/19</u> Time: <u>1540</u>

Lab Courier: JA
Shipped: _____
Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments:

Lab Comments:

Report To (optional)
 Contact: Dean Tieburt
 Company: EFE
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: Dean Tieburt
 Company: EFE
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-17500p
 Chain of Custody Number: _____
 Page 2 of 2
 Temperature °C of Cooler: _____

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Date		Time		# of Containers			
Project Location/State		Lab Project #		Date		Time		# of Containers			
Sampler		Lab PM		Date		Time		# of Containers			
ED1	0945-028										
IDOT 176-001 WO 47E											
Chicko, IL											
M. Fischer		Rich Wright									
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOLs	SVOLs	TOTAL METALS	TCLP METALS	Comments
11		261502-01-B41(35-40)	12/12/19	1130	5	S	X	X	X	X	
12		L L L (40-45)	12/12/19	1210							

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u>	Company: <u>ED1</u>	Date: <u>12/12/19</u>	Time: <u>1425</u>	Received By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>12/12/19</u>	Time: <u>1425</u>
Relinquished By: <u>[Signature]</u>	Company: <u>TA</u>	Date: <u>12/12/19</u>	Time: <u>1540</u>	Received By: <u>[Signature]</u>	Company: <u>TA-CH</u>	Date: <u>12/12/19</u>	Time: <u>1540</u>

Lab Courier: TA
 Shipped: _____
 Hand Delivered: _____

Matrix Key
 WW - Wastewater SE - Sediment
 W - Water SO - Soil
 S - Soil L - Leachate
 SL - Sludge WI - Wipe
 MS - Miscellaneous DW - Drinking Water
 OL - Oil O - Other
 A - Air

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-175006-1

Login Number: 175006

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	7.3,5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist

for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAI 90/94 at I-290 (Jane Byrne Interchange) Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

678 West Roosevelt Road (ISGS #2615V2-262)

City: Chicago State: IL Zip Code: 60607

County: Cook Township: NA

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.8678 Longitude: - 87.64503

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

EPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): _____ Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 30

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Location 2615V2-262-B01 was sampled within the construction zone adjacent to ISGS #2615V2-262 (IDOT Pumping Station #26). Refer to PSI Report for ISGS #2615V2-262 (IDOT Pumping Station #26) including Table 4-4, and Figure 4-10.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

See attached data summary table and associated laboratory data packages J174843-1.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Neil Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

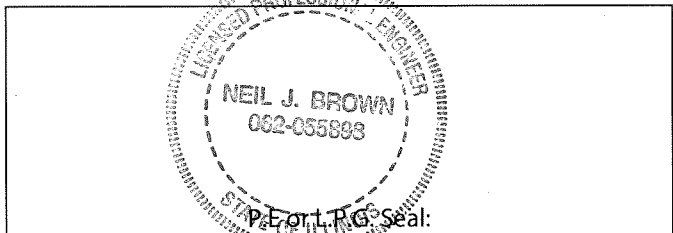
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Ecology and Environment, Inc.
Street Address: 33 West Monroe
City: Chicago State: IL Zip Code: 60603
Phone: 312-578-9243

Neil J. Brown
Printed Name:

Neil J. Brown
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

2-6-2020
Date:



Analytical Data Summary

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in
Uncontaminated Soil Used as Fill Material At Regulated Fill Operations

mg/kg = Milligrams per kilogram.

mg/L = Milligrams per liter.

MSA = Metropolitan Statistical Area

TACO = Tiered Approach to Corrective Action Objectives

TCLP = Toxicity Characteristic Leaching Procedure.

SCGIER = Soil Component of the Groundwater Ingestion Exposure Route

SPLP = Synthetic Precipitation Leaching Procedure.

ND = Not detected.

NA = Not analyzed or not applicable.

J = Estimated value.

U = Analyte was analyzed for but not detected.

PID = Photoionization detector.

-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

= pH is less than 6.25 or greater than 9.0 standard units.

** = Headspace reading above background (outside of instrument margin of error).

† = Concentration exceeds the most stringent MAC.


m = Concentration exceeds the MAC for an MSA.


* = Concentration exceeds the MAC for Chicago corporate limits.

c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.


r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.

L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.

 = Headspace reading exceeds background levels

 = Concentration exceeds the most stringent MAC, but is below the MAC for an MSA.

 = Concentration exceeds the most stringent MAC and the MAC for Chicago corporate limits.

 = Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-259-12; WorkOrder #47E
CONTAMINANTS OF CONCERN

SITE	2615V2-262 (IDOT Pumping Station #26)								Comparison Criteria					
	2615V2-262-B01								MACs			TACO		
BORING									Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	2615V2-262-B01 (0-5)	2615V2-262-B01 (5-10)	2615V2-262-B01 (10-15)	2615V2-262-B01 (15-23)	2615V2-262-B01 (23-31)	2615V2-262-B01 (31-39)	2615V2-262-B01 (31-39)D	2615V2-262-B01 (39-47)						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	5-10	10-15	15-23	23-31	31-39	31-39	39-47						
pH	8.1	7.8	7.7	7.9	8	7.5	7.6	7.5						
PID > Bkd	--													
VOCs (mg/kg)														
Acetone	0.0073	0.034	0.01	0.021	0.012	ND	ND	ND	25	--	--	70,000	100,000	--
Benzene	0.00045	ND	ND	ND	ND	ND	ND	ND	0.03	--	--	0.8	2.2	--
SVOCs (mg/kg)														
2-Methylnaphthalene	0.033	0.03	0.09	0.1	0.058	0.029	0.025	ND	--	--	--	--	--	--
Acenaphthene	0.033	0.05	0.048	0.048	0.037	0.051	0.039	0.044	570	--	--	4,700	120,000	--
Anthracene	0.064	0.024	ND	0.021	ND	ND	ND	ND	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.14	ND	ND	ND	ND	ND	ND	ND	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.13	ND	ND	ND	ND	ND	ND	ND	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.19	ND	ND	ND	ND	ND	ND	ND	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.071	0.016	ND	ND	ND	0.014	ND	0.015	--	--	--	--	--	--
Benzo(k)fluoranthene	0.069	ND	ND	ND	ND	ND	ND	ND	9	--	--	9	1,700	--
Chrysene	0.16	0.029	0.038	0.026	0.017	0.034	ND	0.038	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.024	ND	ND	ND	ND	ND	ND	ND	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND	ND	ND	ND	ND	0.059	ND	ND	--	--	--	--	--	--
Fluoranthene	0.34	0.03	0.035	ND	ND	ND	ND	ND	3,100	--	--	3,100	82,000	--
Fluorene	0.034	ND	ND	0.037	0.034	ND	ND	ND	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.062	ND	ND	ND	ND	ND	ND	ND	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.031	ND	ND	0.052	ND	ND	ND	ND	1.8	--	--	170	1.8	--
Phenanthrene	0.33	0.24	0.21	0.21	0.11	0.3	0.17	0.26	--	--	--	--	--	--
Pyrene	0.32	0.04	0.043	0.038	0.022	0.043	0.03	0.036	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)														
Antimony	0.23	ND	ND	ND	ND	ND	ND	0.26	5	--	--	31	82	0.006
Arsenic	4.6	6.9	6.9	7.2	6.6	11	10	13	11.3	13	--	13	61	0.05
Barium	37	34	41	39	43	18	30	12	1500	--	--	5,500	14,000	2
Beryllium	0.55	0.68	0.7	0.71	0.72	0.48	0.61	0.33	22	--	--	160	410	0.004
Boron	16	17	20	20	20	13	17	9.5	40	--	--	16,000	41,000	2
Cadmium	0.23	0.17	0.16	0.26	0.18	0.26	0.24	0.34	5.2	--	--	78	200	0.005
Calcium	82,000	58,000	57,000	59,000	55,000	53,000	55,000	72,000	--	--	--	--	--	--
Chromium	14	16	17	17	18	11	14	7.2	21	--	--	230	690	0.1
Cobalt	9.5	13	14	13	13	14	15	11	20	--	--	4,700	12,000	1
Copper	23	28	25	27	25	38	33	37	2,900	--	--	2,900	8,200	0.65
Iron	13,000	18,000	19,000	20,000	19,000	19,000	20,000	17,000	15,000	15,900	--	--	--	5
Lead	42	14	13	14	13	19	16	18	107	--	--	400	700	0.0075
Magnesium	44,000	25,000	23,000	23,000	22,000	25,000	25,000	39,000	325,000	--	--	--	730,000	--
Manganese	220	320	320	380	310	360	350	450	630	636	--	1,600	4,100	0.15
Mercury	0.037	0.024	0.022	0.026	0.022	0.031	0.026	0.03	0.89	--	--	10	0.1	0.002
Nickel	24	35	35	34	34	34	37	26	100	--	--	1,600	4,100	0.1
Potassium	2,500	3,200	3,400	3,400	3,300	2,000	2,700	1,300	--	--	--	--	--	--
Selenium	0.41	0.63	ND	0.64	0.48	0.75	0.74	0.88	1.3	--	--	390	1,000	0.05
Silver	1.7	2	2.2	2.3	2.3	1.4	1.8	1.3	4.4	--	--	390	1,000	0.05
Sodium	640	720	370	200	210	140	180	140	--	--	--	--	--	--
Thallium	0.67	0.97	0.96	1.1	1.1	1.2	1.3	1	2.6	--	--	6.3	160	0.002
Vanadium	17	19	21	21	22	14	18	11	550	--	--	550	1,400	0.049
Zinc	58	48	51	72	60	55	58	63	5,100	--	--	23,000	61,000	5
TCLP Metals (mg/L)														
Barium	0.52	0.39	0.6	0.58	0.56	0.3	0.53	0.24	--	--	--	--	--	2
Boron	0.087	0.07	1	0.37	0.1	0.073	1	0.81	--	--	--	--	--	2
Cobalt	0.016	0.011	ND	ND	ND	0.034	0.02	0.041	--	--	--	--	--	1
Iron	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	5
Lead	0.0077	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	0.0075
Manganese	1.6	1.4	1.5	1.7	1.7	1.8	1.7	2	--	--	--	--	--	0.15
Mercury	ND	ND	ND	ND	ND	ND	0.00046	ND	--	--	--	--	--	0.002
Nickel	0.037	0.03	0.028	0.028	0.025	0.065	0.049	0.076	--	--	--	--	--	0.1
Zinc	0.023	ND	0.08	0.032	ND	ND	0.076	0.076	--	--	--	--	--	5
SPLP Metals (mg/L)														
Lead	0.085	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.36	0.022	0.025	0.053	0.19	0.017	0.044	0.012	--	--	--	--	--	0.15

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-174843-1
Client Project/Site: IDOT - 176-001-WO 047

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout



Authorized for release by:
12/27/2019 11:37:58 AM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

LINKS

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results through
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Job ID: 500-174843-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-174843-1

Receipt

The samples were received on 12/10/2019 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

GC/MS VOA

Method 8260B: Internal standard (1,4-Dichlorobenzene-d4) and surrogate standard (4-Bromofluorobenzene) responses were outside of acceptance limits for the following sample: 2615V2-262-B01 (39-47) (500-174843-8). No analytes associated with this internal standard and surrogate standard were detected: therefore the results were reported.

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for 521439 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased low in the LCS/ LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 521351 had 3 analytes outside control limits: 2,4-Dinitrophenol, Nitrobenzene and Phenol. These results have been reported and qualified. (LCS 500-521351/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0073	J	0.016	0.0070	mg/Kg	1	☼	8260B	Total/NA
Benzene	0.00045	J	0.0016	0.00041	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.031	J	0.038	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.033	J	0.076	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.033	J	0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.034	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.33		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.064		0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.34		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.32		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.14		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.16		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.19		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.069		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.062		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.024	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.071		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.6		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	37		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.55		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	16	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	82000		110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.5		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	23		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	44000		54	27	mg/Kg	10	☼	6010B	Total/NA
Manganese	220		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	24		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2500		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	1.7	B	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	640		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.67		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.52		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.087	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.0077		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	1.6		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.037		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.023	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.085		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.037	B	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.034		0.019	0.0081	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.030	J	0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.050		0.041	0.0073	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.24		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.024	J	0.041	0.0068	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.030	J	0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.040	J	0.041	0.0081	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.029	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	58000		110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	28		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3200		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.63		0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0	B	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	720		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.97		0.57	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	48		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.022	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024	B	0.020	0.0068	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.010	J	0.019	0.0082	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.090		0.085	0.0077	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.048		0.042	0.0076	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.21		0.042	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.035	J	0.042	0.0078	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.043		0.042	0.0084	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.038	J	0.042	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	41		0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15) (Continued)

Lab Sample ID: 500-174843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	20	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	35		0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	3400		30	11	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.96		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.080	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.022	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.052		0.040	0.0062	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.10		0.082	0.0075	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.048		0.040	0.0073	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.037	J	0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.21		0.040	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.021	J	0.040	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.038	J	0.040	0.0081	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.2		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.71		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	20	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	27		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	23000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23) (Continued)

Lab Sample ID: 500-174843-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3400		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.64		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	200		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	72		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.58		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.37	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.028		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.032	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.053		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.026	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.018	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.058	J	0.083	0.0076	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.037	J	0.041	0.0074	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.034	J	0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.11		0.041	0.0058	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.017	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.6		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.72		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	20	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000		120	21	mg/Kg	10	☼	6010B	Total/NA
Chromium	18		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	13		0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	25		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	22000		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	310		0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	3300		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	2.3	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.1		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.10	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.19		0.025	0.010	mg/L	1		6010B	SPLP East

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31) (Continued)

Lab Sample ID: 500-174843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.022	B	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.029	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.051		0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Dibenzofuran	0.059	J	0.19	0.044	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.30		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.043		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.034	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.014	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	11		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	18		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	13	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.26	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	53000		110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	38		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	19000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	19		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	34		0.53	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	2000		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.75		0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	1.4	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.2		0.53	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	55		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.30	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.034		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.8		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.065		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.017	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.025	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.039		0.038	0.0069	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.17		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.030	J	0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Arsenic	10		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.58	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	17	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D (Continued)

Lab Sample ID: 500-174843-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.24	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	55000		120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	33		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	20000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	25000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.58	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	37		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	2700		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.74		0.58	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	1.8	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Sodium	180		58	8.6	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.3		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	58		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.53		0.50	0.050	mg/L	1		6010B	TCLP
Boron	1.0		0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.049		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.044		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.00046		0.00020	0.00020	mg/L	1		7470A	TCLP
Mercury	0.026		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.044		0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.26		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.036	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.038		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	13		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	12		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.33		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	9.5	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.34	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	72000		110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	7.2		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	37		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	39000		54	27	mg/Kg	10	☼	6010B	Total/NA
Manganese	450		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	26		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	9.5	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47) (Continued)

Lab Sample ID: 500-174843-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.88		0.54	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	1.3	B	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	140		54	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	1.0		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	63		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.81	F1	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.041		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	2.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.076		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.076	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.012	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-174843-1	2615V2-262-B01 (0-5)	Solid	12/10/19 13:15	12/10/19 15:25	
500-174843-2	2615V2-262-B01 (5-10)	Solid	12/10/19 13:25	12/10/19 15:25	
500-174843-3	2615V2-262-B01 (10-15)	Solid	12/10/19 13:30	12/10/19 15:25	
500-174843-4	2615V2-262-B01 (15-23)	Solid	12/10/19 13:40	12/10/19 15:25	
500-174843-5	2615V2-262-B01 (23-31)	Solid	12/10/19 13:50	12/10/19 15:25	
500-174843-6	2615V2-262-B01 (31-39)	Solid	12/10/19 14:00	12/10/19 15:25	
500-174843-7	2615V2-262-B01 (31-39)D	Solid	12/10/19 14:00	12/10/19 15:25	
500-174843-8	2615V2-262-B01 (39-47)	Solid	12/10/19 14:15	12/10/19 15:25	

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Acetone	0.0073	J	0.016	0.0070	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Benzene	0.00045	J	0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	12/11/19 19:47	12/19/19 15:39	1
4-Bromofluorobenzene (Surr)	108		75 - 131	12/11/19 19:47	12/19/19 15:39	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 15:39	1
Toluene-d8 (Surr)	95		75 - 124	12/11/19 19:47	12/19/19 15:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Naphthalene	0.031	J	0.038	0.0058	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Methylnaphthalene	0.033	J	0.076	0.0070	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Acenaphthene	0.033	J	0.038	0.0068	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Fluorene	0.034	J	0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Phenanthrene	0.33		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Anthracene	0.064		0.038	0.0063	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Fluoranthene	0.34		0.038	0.0070	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Pyrene	0.32		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[a]anthracene	0.14		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.16		0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[b]fluoranthene	0.19		0.038	0.0082	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[k]fluoranthene	0.069		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[a]pyrene	0.13		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Indeno[1,2,3-cd]pyrene	0.062		0.038	0.0098	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Dibenz(a,h)anthracene	0.024	J	0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Benzo[g,h,i]perylene	0.071		0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/24/19 11:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	129		31 - 166				12/18/19 16:01	12/24/19 11:07	1
Phenol-d5	111		30 - 153				12/18/19 16:01	12/24/19 11:07	1
Nitrobenzene-d5	89		37 - 147				12/18/19 16:01	12/24/19 11:07	1
2-Fluorobiphenyl	97		43 - 145				12/18/19 16:01	12/24/19 11:07	1
2,4,6-Tribromophenol	60		31 - 143				12/18/19 16:01	12/24/19 11:07	1
Terphenyl-d14	147		42 - 157				12/18/19 16:01	12/24/19 11:07	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.1	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Arsenic	4.6		0.54	0.19	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Barium	37		0.54	0.062	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Beryllium	0.55		0.22	0.051	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Boron	16	B	2.7	0.25	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Cadmium	0.23	B	0.11	0.019	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Calcium	82000		110	18	mg/Kg	☼	12/17/19 17:12	12/19/19 10:58	10
Chromium	14		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Cobalt	9.5		0.27	0.071	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Copper	23		0.54	0.15	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Iron	13000		11	5.6	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Lead	42		0.27	0.12	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Magnesium	44000		54	27	mg/Kg	☼	12/17/19 17:12	12/19/19 10:58	10
Manganese	220		0.54	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Nickel	24		0.54	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Potassium	2500		27	9.6	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Selenium	0.41	J	0.54	0.32	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Silver	1.7	B	0.27	0.070	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Sodium	640		54	8.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Thallium	0.67		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Vanadium	17		0.27	0.064	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1
Zinc	58		1.1	0.47	mg/Kg	☼	12/17/19 17:12	12/18/19 16:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.52		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:06	1
Boron	0.087	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:06	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:06	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Cobalt	0.016	J	0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:06	1
Lead	0.0077		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:06	1
Manganese	1.6		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Nickel	0.037		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:06	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:06	1
Zinc	0.023	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:06	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.085		0.0075	0.0075	mg/L		12/24/19 15:32	12/26/19 08:47	1
Manganese	0.36		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:47	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:13	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:13	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	B	0.018	0.0061	mg/Kg	☼	12/18/19 14:15	12/19/19 07:54	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Acetone	0.034		0.019	0.0081	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Bromomethane	<0.0046		0.0046	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chloroethane	<0.0046 *		0.0046	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	12/11/19 19:47	12/19/19 16:04	1
4-Bromofluorobenzene (Surr)	112		75 - 131	12/11/19 19:47	12/19/19 16:04	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 16:04	1
Toluene-d8 (Surr)	95		75 - 124	12/11/19 19:47	12/19/19 16:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.091	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Methylnaphthalene	0.030	J	0.082	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Acenaphthene	0.050		0.041	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Phenanthrene	0.24		0.041	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Anthracene	0.024	J	0.041	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Fluoranthene	0.030	J	0.041	0.0076	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Pyrene	0.040	J	0.041	0.0081	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzof[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.029	J	0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
Benzo[g,h,i]perylene	0.016	J	0.041	0.013	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/18/19 16:01	12/21/19 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		31 - 166	12/18/19 16:01	12/21/19 21:01	1
Phenol-d5	93		30 - 153	12/18/19 16:01	12/21/19 21:01	1
Nitrobenzene-d5	79		37 - 147	12/18/19 16:01	12/21/19 21:01	1
2-Fluorobiphenyl	103		43 - 145	12/18/19 16:01	12/21/19 21:01	1
2,4,6-Tribromophenol	47		31 - 143	12/18/19 16:01	12/21/19 21:01	1
Terphenyl-d14	115		42 - 157	12/18/19 16:01	12/21/19 21:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Arsenic	6.9		0.57	0.20	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Barium	34		0.57	0.065	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Beryllium	0.68		0.23	0.054	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Boron	17	B	2.9	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Cadmium	0.17	B	0.11	0.021	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Calcium	58000		110	19	mg/Kg	☼	12/17/19 17:12	12/19/19 11:02	10
Chromium	16		0.57	0.28	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Cobalt	13		0.29	0.075	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Copper	28		0.57	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Iron	18000		11	6.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Lead	14		0.29	0.13	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Magnesium	25000		5.7	2.8	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Manganese	320		0.57	0.083	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Nickel	35		0.57	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Potassium	3200		29	10	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Selenium	0.63		0.57	0.34	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Silver	2.0	B	0.29	0.074	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Sodium	720		57	8.5	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Thallium	0.97		0.57	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Vanadium	19		0.29	0.068	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1
Zinc	48		1.1	0.50	mg/Kg	☼	12/17/19 17:12	12/18/19 16:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.39	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:10	1
Boron	0.070	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:10	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Cobalt	0.011	J	0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:10	1
Manganese	1.4		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Nickel	0.030		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:10	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:10	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:10	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.022	J	0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:51	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:15	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	B	0.020	0.0068	mg/Kg	☼	12/18/19 14:15	12/19/19 07:56	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Acetone	0.010	J	0.019	0.0082	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chloroethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Vinyl acetate	<0.0047		0.0047	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 16:30	1
4-Bromofluorobenzene (Surr)	101		75 - 131	12/11/19 19:47	12/19/19 16:30	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 16:30	1
Toluene-d8 (Surr)	102		75 - 124	12/11/19 19:47	12/19/19 16:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Nitrobenzene	<0.042	*	0.042	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Methylnaphthalene	0.090		0.085	0.0077	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,6-Dinitrotoluene	<0.21		0.21	0.083	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dinitrophenol	<0.85	*	0.85	0.74	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Acenaphthene	0.048		0.042	0.0076	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Hexachlorobenzene	<0.085		0.085	0.0098	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Pentachlorophenol	<0.85		0.85	0.68	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Phenanthrene	0.21		0.042	0.0059	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Fluoranthene	0.035	J	0.042	0.0078	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Pyrene	0.043		0.042	0.0084	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzof[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.038	J	0.042	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Di-n-octyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:01	12/21/19 21:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	102		31 - 166				12/18/19 16:01	12/21/19 21:31	1
Phenol-d5	95		30 - 153				12/18/19 16:01	12/21/19 21:31	1
Nitrobenzene-d5	78		37 - 147				12/18/19 16:01	12/21/19 21:31	1
2-Fluorobiphenyl	100		43 - 145				12/18/19 16:01	12/21/19 21:31	1
2,4,6-Tribromophenol	48		31 - 143				12/18/19 16:01	12/21/19 21:31	1
Terphenyl-d14	116		42 - 157				12/18/19 16:01	12/21/19 21:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Arsenic	6.9		0.60	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Barium	41		0.60	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Beryllium	0.70		0.24	0.056	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Boron	20	B	3.0	0.28	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Cadmium	0.16	B	0.12	0.022	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Calcium	57000		120	20	mg/Kg	☼	12/17/19 17:12	12/19/19 11:06	10
Chromium	17		0.60	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Cobalt	14		0.30	0.079	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Copper	25		0.60	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Iron	19000		12	6.2	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Lead	13		0.30	0.14	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Magnesium	23000		6.0	3.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Manganese	320		0.60	0.087	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Nickel	35		0.60	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Potassium	3400		30	11	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Silver	2.2	B	0.30	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Sodium	370		60	8.9	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Thallium	0.96		0.60	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Vanadium	21		0.30	0.071	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1
Zinc	51		1.2	0.53	mg/Kg	☼	12/17/19 17:12	12/18/19 16:50	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.60		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:15	1
Boron	1.0		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:15	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:15	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:15	1
Manganese	1.5		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Nickel	0.028		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:15	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:15	1
Zinc	0.080	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.025		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:55	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:18	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.019	0.0062	mg/Kg	☼	12/18/19 14:15	12/19/19 07:58	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Acetone	0.021		0.017	0.0076	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chloroethane	<0.0043 *		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 16:55	1
4-Bromofluorobenzene (Surr)	97		75 - 131	12/11/19 19:47	12/19/19 16:55	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 16:55	1
Toluene-d8 (Surr)	95		75 - 124	12/11/19 19:47	12/19/19 16:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.090	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Nitrobenzene	<0.040	*	0.040	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Naphthalene	0.052		0.040	0.0062	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Methylnaphthalene	0.10		0.082	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Acenaphthene	0.048		0.040	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Fluorene	0.037	J	0.040	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Phenanthrene	0.21		0.040	0.0057	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Anthracene	0.021	J	0.040	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Pyrene	0.038	J	0.040	0.0081	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzof[a]anthracene	<0.040		0.040	0.0055	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1

Euofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.026	J	0.040	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	12/18/19 16:01	12/21/19 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		31 - 166				12/18/19 16:01	12/21/19 18:34	1
Phenol-d5	94		30 - 153				12/18/19 16:01	12/21/19 18:34	1
Nitrobenzene-d5	82		37 - 147				12/18/19 16:01	12/21/19 18:34	1
2-Fluorobiphenyl	102		43 - 145				12/18/19 16:01	12/21/19 18:34	1
2,4,6-Tribromophenol	56		31 - 143				12/18/19 16:01	12/21/19 18:34	1
Terphenyl-d14	110		42 - 157				12/18/19 16:01	12/21/19 18:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Arsenic	7.2		0.58	0.20	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Barium	39		0.58	0.066	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Beryllium	0.71		0.23	0.054	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Boron	20	B	2.9	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Cadmium	0.26	B	0.12	0.021	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Calcium	59000		120	20	mg/Kg	☼	12/17/19 17:12	12/19/19 11:10	10
Chromium	17		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Cobalt	13		0.29	0.076	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Copper	27		0.58	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Iron	20000		12	6.1	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Lead	14		0.29	0.13	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Magnesium	23000		5.8	2.9	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Manganese	380		0.58	0.085	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Nickel	34		0.58	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Potassium	3400		29	10	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Selenium	0.64		0.58	0.34	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Silver	2.3	B	0.29	0.075	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Sodium	200		58	8.6	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Thallium	1.1		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Vanadium	21		0.29	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1
Zinc	72		1.2	0.51	mg/Kg	☼	12/17/19 17:12	12/18/19 16:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.58		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:19	1
Boron	0.37	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:19	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:19	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:19	1
Manganese	1.7		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Nickel	0.028		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:19	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:19	1
Zinc	0.032	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:19	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.053		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:59	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:20	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	B	0.019	0.0062	mg/Kg	☼	12/18/19 14:15	12/19/19 08:00	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Acetone	0.012	J	0.018	0.0076	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 17:21	1
4-Bromofluorobenzene (Surr)	99		75 - 131	12/11/19 19:47	12/19/19 17:21	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 17:21	1
Toluene-d8 (Surr)	100		75 - 124	12/11/19 19:47	12/19/19 17:21	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.092	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Nitrobenzene	<0.041	*	0.041	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Methylnaphthalene	0.058	J	0.083	0.0076	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dinitrophenol	<0.83	*	0.83	0.73	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Acenaphthene	0.037	J	0.041	0.0074	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Fluorene	0.034	J	0.041	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Phenanthrene	0.11		0.041	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Pyrene	0.022	J	0.041	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzof[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.017	J	0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[b]fluoranthene	<0.041		0.041	0.0089	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[a]pyrene	<0.041		0.041	0.0080	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	103		31 - 166				12/18/19 16:01	12/21/19 19:04	1
Phenol-d5	89		30 - 153				12/18/19 16:01	12/21/19 19:04	1
Nitrobenzene-d5	80		37 - 147				12/18/19 16:01	12/21/19 19:04	1
2-Fluorobiphenyl	98		43 - 145				12/18/19 16:01	12/21/19 19:04	1
2,4,6-Tribromophenol	54		31 - 143				12/18/19 16:01	12/21/19 19:04	1
Terphenyl-d14	103		42 - 157				12/18/19 16:01	12/21/19 19:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Arsenic	6.6		0.61	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Barium	43		0.61	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Beryllium	0.72		0.24	0.057	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Boron	20	B	3.0	0.28	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Cadmium	0.18	B	0.12	0.022	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Calcium	55000		120	21	mg/Kg	☼	12/17/19 17:12	12/19/19 11:14	10
Chromium	18		0.61	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Cobalt	13		0.30	0.079	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Copper	25		0.61	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Iron	19000		12	6.3	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Lead	13		0.30	0.14	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Magnesium	22000		6.1	3.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Manganese	310		0.61	0.088	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Nickel	34		0.61	0.18	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Potassium	3300		30	11	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Selenium	0.48	J	0.61	0.36	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Silver	2.3	B	0.30	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Sodium	210		61	9.0	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Thallium	1.1		0.61	0.30	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Vanadium	22		0.30	0.071	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1
Zinc	60		1.2	0.53	mg/Kg	☼	12/17/19 17:12	12/18/19 16:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.56		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:32	1
Boron	0.10	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:32	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:32	1
Manganese	1.7		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Nickel	0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:32	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:32	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:32	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.19		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:03	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:22	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	B	0.019	0.0062	mg/Kg	☼	12/18/19 14:15	12/19/19 08:02	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chloroethane	<0.0039 *		0.0039	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	12/11/19 19:47	12/19/19 17:46	1
4-Bromofluorobenzene (Surr)	106		75 - 131	12/11/19 19:47	12/19/19 17:46	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 17:46	1
Toluene-d8 (Surr)	103		75 - 124	12/11/19 19:47	12/19/19 17:46	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.084	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Nitrobenzene	<0.038	*	0.038	0.0094	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Methylnaphthalene	0.029	J	0.076	0.0069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Acenaphthene	0.051		0.038	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Dibenzofuran	0.059	J	0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Phenanthrene	0.30		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Pyrene	0.043		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzof[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.034	J	0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
Benzo[g,h,i]perylene	0.014	J	0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	96		31 - 166	12/18/19 16:01	12/21/19 19:33	1
Phenol-d5	89		30 - 153	12/18/19 16:01	12/21/19 19:33	1
Nitrobenzene-d5	81		37 - 147	12/18/19 16:01	12/21/19 19:33	1
2-Fluorobiphenyl	99		43 - 145	12/18/19 16:01	12/21/19 19:33	1
2,4,6-Tribromophenol	37		31 - 143	12/18/19 16:01	12/21/19 19:33	1
Terphenyl-d14	100		42 - 157	12/18/19 16:01	12/21/19 19:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Arsenic	11		0.53	0.18	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Barium	18		0.53	0.061	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Beryllium	0.48		0.21	0.050	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Boron	13	B	2.7	0.25	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Cadmium	0.26	B	0.11	0.019	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Calcium	53000		110	18	mg/Kg	☼	12/17/19 17:12	12/19/19 12:53	10
Chromium	11		0.53	0.26	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Cobalt	14		0.27	0.070	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Copper	38		0.53	0.15	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Iron	19000		11	5.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Lead	19		0.27	0.12	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Magnesium	25000		5.3	2.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Manganese	360		0.53	0.077	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Nickel	34		0.53	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Potassium	2000		27	9.5	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Selenium	0.75		0.53	0.31	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Silver	1.4	B	0.27	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Sodium	140		53	7.9	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Thallium	1.2		0.53	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Vanadium	14		0.27	0.063	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1
Zinc	55		1.1	0.47	mg/Kg	☼	12/17/19 17:12	12/18/19 17:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.30	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:37	1
Boron	0.073	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:37	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:37	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Cobalt	0.034		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:37	1
Manganese	1.8		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Nickel	0.065		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:37	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:37	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:37	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.017	J	0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:24	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:24	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 10:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.018	0.0059	mg/Kg	☼	12/18/19 14:15	12/19/19 08:08	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	12/11/19 19:47	12/19/19 18:12	1
4-Bromofluorobenzene (Surr)	101		75 - 131	12/11/19 19:47	12/19/19 18:12	1
Dibromofluoromethane	85		75 - 126	12/11/19 19:47	12/19/19 18:12	1
Toluene-d8 (Surr)	93		75 - 124	12/11/19 19:47	12/19/19 18:12	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.086	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Nitrobenzene	<0.038	*	0.038	0.0096	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Methylnaphthalene	0.025	J	0.078	0.0071	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dinitrophenol	<0.78	*	0.78	0.68	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Acenaphthene	0.039		0.038	0.0069	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Phenanthrene	0.17		0.038	0.0054	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Anthracene	<0.038		0.038	0.0065	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Carbazole	<0.19		0.19	0.097	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Fluoranthene	<0.038		0.038	0.0072	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Pyrene	0.030	J	0.038	0.0077	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzof[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[a]pyrene	<0.038		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		31 - 166	12/18/19 16:01	12/21/19 20:03	1
Phenol-d5	99		30 - 153	12/18/19 16:01	12/21/19 20:03	1
Nitrobenzene-d5	89		37 - 147	12/18/19 16:01	12/21/19 20:03	1
2-Fluorobiphenyl	105		43 - 145	12/18/19 16:01	12/21/19 20:03	1
2,4,6-Tribromophenol	55		31 - 143	12/18/19 16:01	12/21/19 20:03	1
Terphenyl-d14	111		42 - 157	12/18/19 16:01	12/21/19 20:03	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Arsenic	10		0.58	0.20	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Barium	30		0.58	0.067	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Beryllium	0.61		0.23	0.054	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Boron	17 B		2.9	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Cadmium	0.24 B		0.12	0.021	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Calcium	55000		120	20	mg/Kg	☼	12/17/19 17:12	12/19/19 13:01	10
Chromium	14		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Cobalt	15		0.29	0.076	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Copper	33		0.58	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Iron	20000		12	6.1	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Lead	16		0.29	0.13	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Magnesium	25000		5.8	2.9	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Manganese	350		0.58	0.085	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Nickel	37		0.58	0.17	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Potassium	2700		29	10	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Selenium	0.74		0.58	0.34	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Silver	1.8 B		0.29	0.075	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Sodium	180		58	8.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Thallium	1.3		0.58	0.29	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Vanadium	18		0.29	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1
Zinc	58		1.2	0.51	mg/Kg	☼	12/17/19 17:12	12/18/19 17:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.53		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:41	1
Boron	1.0		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:41	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Cobalt	0.020	J	0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:41	1
Manganese	1.7		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Nickel	0.049		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:41	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:41	1
Zinc	0.076	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:41	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.044		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:11	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00046		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 10:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0063	mg/Kg	☼	12/18/19 14:15	12/19/19 08:10	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1,2,2-Tetrachloroethane	<0.0017	*	0.0017	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Acetone	<0.017		0.017	0.0072	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chloroform	<0.0017		0.0017	0.00057	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00048	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	12/11/19 19:47	12/19/19 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	12/11/19 19:47	12/19/19 18:37	1
4-Bromofluorobenzene (Surr)	149	X *	75 - 131	12/11/19 19:47	12/19/19 18:37	1
Dibromofluoromethane	86		75 - 126	12/11/19 19:47	12/19/19 18:37	1
Toluene-d8 (Surr)	116		75 - 124	12/11/19 19:47	12/19/19 18:37	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.084	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Nitrobenzene	<0.038	*	0.038	0.0094	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dinitrophenol	<0.76	*	0.76	0.67	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Acenaphthene	0.044		0.038	0.0068	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Phenanthrene	0.26		0.038	0.0053	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Fluoranthene	<0.038		0.038	0.0070	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Pyrene	0.036	J	0.038	0.0075	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzof[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.038		0.038	0.010	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
Benzo[g,h,i]perylene	0.015	J	0.038	0.012	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/18/19 16:01	12/21/19 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	108		31 - 166	12/18/19 16:01	12/21/19 20:32	1
Phenol-d5	102		30 - 153	12/18/19 16:01	12/21/19 20:32	1
Nitrobenzene-d5	89		37 - 147	12/18/19 16:01	12/21/19 20:32	1
2-Fluorobiphenyl	107		43 - 145	12/18/19 16:01	12/21/19 20:32	1
2,4,6-Tribromophenol	49		31 - 143	12/18/19 16:01	12/21/19 20:32	1
Terphenyl-d14	109		42 - 157	12/18/19 16:01	12/21/19 20:32	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.26	J	1.1	0.21	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Arsenic	13		0.54	0.18	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Barium	12		0.54	0.061	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Beryllium	0.33		0.21	0.050	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Boron	9.5	B	2.7	0.25	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Cadmium	0.34	B	0.11	0.019	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Calcium	72000		110	18	mg/Kg	☼	12/17/19 17:12	12/19/19 13:05	10
Chromium	7.2		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Cobalt	11		0.27	0.070	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Copper	37		0.54	0.15	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Iron	17000		11	5.6	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Lead	18		0.27	0.12	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Magnesium	39000		54	27	mg/Kg	☼	12/17/19 17:12	12/19/19 13:05	10
Manganese	450		0.54	0.078	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Nickel	26		0.54	0.16	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Potassium	1300		27	9.5	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Selenium	0.88		0.54	0.31	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Silver	1.3	B	0.27	0.069	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Sodium	140		54	7.9	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Thallium	1.0		0.54	0.27	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Vanadium	11		0.27	0.063	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1
Zinc	63		1.1	0.47	mg/Kg	☼	12/17/19 17:12	12/18/19 17:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 17:46	1
Boron	0.81	F1	0.50	0.050	mg/L		12/24/19 06:24	12/24/19 17:46	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 17:46	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:46	1
Cobalt	0.041		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:46	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 17:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 17:46	1
Manganese	2.0		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:46	1
Nickel	0.076		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:46	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 17:46	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 17:46	1
Zinc	0.076	J	0.50	0.020	mg/L		12/24/19 06:24	12/24/19 17:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.012	J	0.025	0.010	mg/L		12/24/19 15:32	12/26/19 09:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:29	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 10:04	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.018	0.0059	mg/Kg	☼	12/18/19 14:15	12/19/19 08:17	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

GC/MS VOA

Prep Batch: 520652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	5035	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	5035	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	5035	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	5035	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	5035	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	5035	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	5035	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	5035	

Analysis Batch: 521439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	8260B	520652
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	8260B	520652
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	8260B	520652
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	8260B	520652
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	8260B	520652
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	8260B	520652
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	8260B	520652
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	8260B	520652
MB 500-521439/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-521439/26	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-521439/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 521351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	3541	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	3541	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	3541	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	3541	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	3541	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	3541	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	3541	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	3541	
MB 500-521351/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-521351/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 521902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	8270D	521351
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	8270D	521351
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	8270D	521351
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	8270D	521351
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	8270D	521351
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	8270D	521351
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	8270D	521351

Analysis Batch: 522137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521351/1-A	Method Blank	Total/NA	Solid	8270D	521351

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

GC/MS Semi VOA (Continued)

Analysis Batch: 522137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-521351/2-A	Lab Control Sample	Total/NA	Solid	8270D	521351

Analysis Batch: 522273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	8270D	521351

Metals

Prep Batch: 521131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	3050B	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	3050B	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	3050B	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	3050B	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	3050B	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	3050B	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	3050B	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	3050B	
MB 500-521131/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-521131/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 521249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	7471B	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	7471B	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	7471B	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	7471B	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	7471B	
MB 500-521249/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521249/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 521259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	7471B	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	7471B	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	7471B	
MB 500-521259/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-521259/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 521401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	6010B	521131
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	6010B	521131
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	6010B	521131
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	6010B	521131
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	6010B	521131
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	6010B	521131
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	6010B	521131
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	6010B	521131
MB 500-521131/1-A	Method Blank	Total/NA	Solid	6010B	521131
LCS 500-521131/2-A	Lab Control Sample	Total/NA	Solid	6010B	521131

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals

Analysis Batch: 521492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	7471B	521249
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	7471B	521249
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	7471B	521249
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	7471B	521249
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	7471B	521249
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	7471B	521259
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	7471B	521259
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	7471B	521259
MB 500-521249/12-A	Method Blank	Total/NA	Solid	7471B	521249
MB 500-521259/12-A	Method Blank	Total/NA	Solid	7471B	521259
LCS 500-521249/13-A	Lab Control Sample	Total/NA	Solid	7471B	521249
LCS 500-521259/13-A	Lab Control Sample	Total/NA	Solid	7471B	521259

Leach Batch: 521522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	1311	
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	1311	
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	1311	
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	1311	
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	1311	
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	1311	
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	1311	
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	1311	
LB 500-521522/1-B	Method Blank	TCLP	Solid	1311	
LB 500-521522/1-C	Method Blank	TCLP	Solid	1311	
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	1311	
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	1311	

Analysis Batch: 521527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	6010B	521131
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	6010B	521131
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	6010B	521131
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	6010B	521131
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	6010B	521131
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	6010B	521131
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	6010B	521131
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	6010B	521131

Leach Batch: 522173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	SPLP East	Solid	1312	
500-174843-2	2615V2-262-B01 (5-10)	SPLP East	Solid	1312	
500-174843-3	2615V2-262-B01 (10-15)	SPLP East	Solid	1312	
500-174843-4	2615V2-262-B01 (15-23)	SPLP East	Solid	1312	
500-174843-5	2615V2-262-B01 (23-31)	SPLP East	Solid	1312	
500-174843-6	2615V2-262-B01 (31-39)	SPLP East	Solid	1312	
500-174843-7	2615V2-262-B01 (31-39)D	SPLP East	Solid	1312	
500-174843-8	2615V2-262-B01 (39-47)	SPLP East	Solid	1312	
LB 500-522173/1-B	Method Blank	SPLP East	Solid	1312	
500-174843-8 MS	2615V2-262-B01 (39-47)	SPLP East	Solid	1312	

Euromins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals (Continued)

Leach Batch: 522173 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-8 DU	2615V2-262-B01 (39-47)	SPLP East	Solid	1312	

Prep Batch: 522245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	3010A	521522
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	3010A	521522
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	3010A	521522
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	3010A	521522
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	3010A	521522
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	3010A	521522
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	3010A	521522
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	3010A	521522
LB 500-521522/1-B	Method Blank	TCLP	Solid	3010A	521522
LCS 500-522245/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	3010A	521522
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	3010A	521522

Prep Batch: 522310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	7470A	521522
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	7470A	521522
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	7470A	521522
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	7470A	521522
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	7470A	521522
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	7470A	521522
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	7470A	521522
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	7470A	521522
LB 500-521522/1-C	Method Blank	TCLP	Solid	7470A	521522
MB 500-522310/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-522310/15-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 522365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	SPLP East	Solid	3010A	522173
500-174843-2	2615V2-262-B01 (5-10)	SPLP East	Solid	3010A	522173
500-174843-3	2615V2-262-B01 (10-15)	SPLP East	Solid	3010A	522173
500-174843-4	2615V2-262-B01 (15-23)	SPLP East	Solid	3010A	522173
500-174843-5	2615V2-262-B01 (23-31)	SPLP East	Solid	3010A	522173
500-174843-6	2615V2-262-B01 (31-39)	SPLP East	Solid	3010A	522173
500-174843-7	2615V2-262-B01 (31-39)D	SPLP East	Solid	3010A	522173
500-174843-8	2615V2-262-B01 (39-47)	SPLP East	Solid	3010A	522173
LB 500-522173/1-B	Method Blank	SPLP East	Solid	3010A	522173
LCS 500-522365/2-A	Lab Control Sample	Total/NA	Solid	3010A	
500-174843-8 MS	2615V2-262-B01 (39-47)	SPLP East	Solid	3010A	522173
500-174843-8 DU	2615V2-262-B01 (39-47)	SPLP East	Solid	3010A	522173

Analysis Batch: 522413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	6010B	522245
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	6010B	522245
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	6010B	522245

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals (Continued)

Analysis Batch: 522413 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	6010B	522245
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	6010B	522245
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	6010B	522245
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	6010B	522245
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	6010B	522245
LB 500-521522/1-B	Method Blank	TCLP	Solid	6010B	522245
LCS 500-522245/2-A	Lab Control Sample	Total/NA	Solid	6010B	522245
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	6010B	522245
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	6010B	522245

Analysis Batch: 522524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	7470A	522310
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	7470A	522310
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	7470A	522310
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	7470A	522310
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	7470A	522310
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	7470A	522310
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	7470A	522310
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	7470A	522310
LB 500-521522/1-C	Method Blank	TCLP	Solid	7470A	522310
MB 500-522310/12-A	Method Blank	Total/NA	Solid	7470A	522310
LCS 500-522310/15-A	Lab Control Sample	Total/NA	Solid	7470A	522310

Analysis Batch: 522543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	SPLP East	Solid	6010B	522365
500-174843-2	2615V2-262-B01 (5-10)	SPLP East	Solid	6010B	522365
500-174843-3	2615V2-262-B01 (10-15)	SPLP East	Solid	6010B	522365
500-174843-4	2615V2-262-B01 (15-23)	SPLP East	Solid	6010B	522365
500-174843-5	2615V2-262-B01 (23-31)	SPLP East	Solid	6010B	522365
500-174843-6	2615V2-262-B01 (31-39)	SPLP East	Solid	6010B	522365
500-174843-7	2615V2-262-B01 (31-39)D	SPLP East	Solid	6010B	522365
500-174843-8	2615V2-262-B01 (39-47)	SPLP East	Solid	6010B	522365
LB 500-522173/1-B	Method Blank	SPLP East	Solid	6010B	522365
LCS 500-522365/2-A	Lab Control Sample	Total/NA	Solid	6010B	522365
500-174843-8 MS	2615V2-262-B01 (39-47)	SPLP East	Solid	6010B	522365
500-174843-8 DU	2615V2-262-B01 (39-47)	SPLP East	Solid	6010B	522365

Analysis Batch: 522587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	TCLP	Solid	6020A	522245
500-174843-2	2615V2-262-B01 (5-10)	TCLP	Solid	6020A	522245
500-174843-3	2615V2-262-B01 (10-15)	TCLP	Solid	6020A	522245
500-174843-4	2615V2-262-B01 (15-23)	TCLP	Solid	6020A	522245
500-174843-5	2615V2-262-B01 (23-31)	TCLP	Solid	6020A	522245
500-174843-6	2615V2-262-B01 (31-39)	TCLP	Solid	6020A	522245
500-174843-7	2615V2-262-B01 (31-39)D	TCLP	Solid	6020A	522245
500-174843-8	2615V2-262-B01 (39-47)	TCLP	Solid	6020A	522245
LB 500-521522/1-B	Method Blank	TCLP	Solid	6020A	522245
LCS 500-522245/2-A	Lab Control Sample	Total/NA	Solid	6020A	522245

Eurofins TestAmerica, Chicago

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Metals (Continued)

Analysis Batch: 522587 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-8 MS	2615V2-262-B01 (39-47)	TCLP	Solid	6020A	522245
500-174843-8 DU	2615V2-262-B01 (39-47)	TCLP	Solid	6020A	522245

General Chemistry

Analysis Batch: 521013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-174843-1	2615V2-262-B01 (0-5)	Total/NA	Solid	Moisture	
500-174843-2	2615V2-262-B01 (5-10)	Total/NA	Solid	Moisture	
500-174843-3	2615V2-262-B01 (10-15)	Total/NA	Solid	Moisture	
500-174843-4	2615V2-262-B01 (15-23)	Total/NA	Solid	Moisture	
500-174843-5	2615V2-262-B01 (23-31)	Total/NA	Solid	Moisture	
500-174843-6	2615V2-262-B01 (31-39)	Total/NA	Solid	Moisture	
500-174843-7	2615V2-262-B01 (31-39)D	Total/NA	Solid	Moisture	
500-174843-8	2615V2-262-B01 (39-47)	Total/NA	Solid	Moisture	
500-174843-8 DU	2615V2-262-B01 (39-47)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-134)	BFB (75-131)	DBFM (75-126)	TOL (75-124)
500-174843-1	2615V2-262-B01 (0-5)	94	108	86	95
500-174843-2	2615V2-262-B01 (5-10)	90	112	86	95
500-174843-3	2615V2-262-B01 (10-15)	91	101	85	102
500-174843-4	2615V2-262-B01 (15-23)	91	97	86	95
500-174843-5	2615V2-262-B01 (23-31)	91	99	85	100
500-174843-6	2615V2-262-B01 (31-39)	89	106	85	103
500-174843-7	2615V2-262-B01 (31-39)D	91	101	85	93
500-174843-8	2615V2-262-B01 (39-47)	90	149 X *	86	116
LCS 500-521439/26	Lab Control Sample	85	94	83	94
LCSD 500-521439/7	Lab Control Sample Dup	85	94	83	95
MB 500-521439/6	Method Blank	85	99	81	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (31-166)	PHL (30-153)	NBZ (37-147)	FBP (43-145)	TBP (31-143)	TPHL (42-157)
500-174843-1	2615V2-262-B01 (0-5)	129	111	89	97	60	147
500-174843-2	2615V2-262-B01 (5-10)	102	93	79	103	47	115
500-174843-3	2615V2-262-B01 (10-15)	102	95	78	100	48	116
500-174843-4	2615V2-262-B01 (15-23)	103	94	82	102	56	110
500-174843-5	2615V2-262-B01 (23-31)	103	89	80	98	54	103
500-174843-6	2615V2-262-B01 (31-39)	96	89	81	99	37	100
500-174843-7	2615V2-262-B01 (31-39)D	112	99	89	105	55	111
500-174843-8	2615V2-262-B01 (39-47)	108	102	89	107	49	109
LCS 500-521351/2-A	Lab Control Sample	134	116	96	98	76	98
MB 500-521351/1-A	Method Blank	164	134	106	107	64	135

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521439/6
Matrix: Solid
Analysis Batch: 521439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			12/19/19 10:57	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			12/19/19 10:57	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			12/19/19 10:57	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 10:57	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 10:57	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			12/19/19 10:57	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			12/19/19 10:57	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			12/19/19 10:57	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			12/19/19 10:57	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			12/19/19 10:57	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			12/19/19 10:57	1
Acetone	<0.020		0.020	0.0087	mg/Kg			12/19/19 10:57	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			12/19/19 10:57	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			12/19/19 10:57	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			12/19/19 10:57	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			12/19/19 10:57	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			12/19/19 10:57	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			12/19/19 10:57	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			12/19/19 10:57	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			12/19/19 10:57	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			12/19/19 10:57	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			12/19/19 10:57	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			12/19/19 10:57	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			12/19/19 10:57	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			12/19/19 10:57	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			12/19/19 10:57	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			12/19/19 10:57	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			12/19/19 10:57	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			12/19/19 10:57	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/19/19 10:57	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			12/19/19 10:57	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			12/19/19 10:57	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			12/19/19 10:57	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			12/19/19 10:57	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			12/19/19 10:57	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			12/19/19 10:57	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			12/19/19 10:57	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	85		70 - 134		12/19/19 10:57	1
4-Bromofluorobenzene (Surr)	99		75 - 131		12/19/19 10:57	1
Dibromofluoromethane	81		75 - 126		12/19/19 10:57	1
Toluene-d8 (Surr)	92		75 - 124		12/19/19 10:57	1

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521439/26

Matrix: Solid

Analysis Batch: 521439

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0401		mg/Kg		80	70 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.0438		mg/Kg		88	70 - 122
1,1,2-Trichloroethane	0.0500	0.0449		mg/Kg		90	70 - 125
1,1-Dichloroethane	0.0500	0.0450		mg/Kg		90	70 - 125
1,1-Dichloroethene	0.0500	0.0441		mg/Kg		88	70 - 120
1,2-Dichloroethane	0.0500	0.0434		mg/Kg		87	70 - 130
1,2-Dichloropropane	0.0500	0.0480		mg/Kg		96	70 - 125
2-Butanone (MEK)	0.0500	0.0417		mg/Kg		83	47 - 138
2-Hexanone	0.0500	0.0409		mg/Kg		82	48 - 146
4-Methyl-2-pentanone (MIBK)	0.0500	0.0387		mg/Kg		77	50 - 148
Acetone	0.0500	0.0473		mg/Kg		95	40 - 150
Benzene	0.0500	0.0442		mg/Kg		88	70 - 125
Bromodichloromethane	0.0500	0.0401		mg/Kg		80	67 - 129
Bromoform	0.0500	0.0365		mg/Kg		73	68 - 136
Bromomethane	0.0500	0.0358		mg/Kg		72	70 - 130
Carbon disulfide	0.0500	0.0421		mg/Kg		84	70 - 129
Carbon tetrachloride	0.0500	0.0391		mg/Kg		78	75 - 125
Chlorobenzene	0.0500	0.0446		mg/Kg		89	50 - 150
Chloroethane	0.0500	0.0352	*	mg/Kg		70	75 - 125
Chloroform	0.0500	0.0397		mg/Kg		79	57 - 135
Chloromethane	0.0500	0.0426		mg/Kg		85	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0417		mg/Kg		83	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0420		mg/Kg		84	70 - 125
Dibromochloromethane	0.0500	0.0397		mg/Kg		79	69 - 125
Ethylbenzene	0.0500	0.0446		mg/Kg		89	61 - 136
Methyl tert-butyl ether	0.0500	0.0416		mg/Kg		83	50 - 140
Methylene Chloride	0.0500	0.0418		mg/Kg		84	70 - 126
Styrene	0.0500	0.0434		mg/Kg		87	70 - 125
Tetrachloroethene	0.0500	0.0454		mg/Kg		91	70 - 124
Toluene	0.0500	0.0450		mg/Kg		90	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0419		mg/Kg		84	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0416		mg/Kg		83	70 - 125
Trichloroethene	0.0500	0.0439		mg/Kg		88	70 - 125
Vinyl acetate	0.0500	0.0324		mg/Kg		65	40 - 153
Vinyl chloride	0.0500	0.0383		mg/Kg		77	70 - 125
Xylenes, Total	0.100	0.0873		mg/Kg		87	53 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	83		75 - 126
Toluene-d8 (Surr)	94		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-521439/7

Matrix: Solid

Analysis Batch: 521439

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0402		mg/Kg		80	70 - 128	0	30
1,1,2,2-Tetrachloroethane	0.0500	0.0426		mg/Kg		85	70 - 122	3	30
1,1,2-Trichloroethane	0.0500	0.0445		mg/Kg		89	70 - 125	1	30
1,1-Dichloroethane	0.0500	0.0444		mg/Kg		89	70 - 125	1	30
1,1-Dichloroethene	0.0500	0.0442		mg/Kg		88	70 - 120	0	30
1,2-Dichloroethane	0.0500	0.0427		mg/Kg		85	70 - 130	2	30
1,2-Dichloropropane	0.0500	0.0473		mg/Kg		95	70 - 125	1	30
2-Butanone (MEK)	0.0500	0.0437		mg/Kg		87	47 - 138	5	30
2-Hexanone	0.0500	0.0433		mg/Kg		87	48 - 146	6	30
4-Methyl-2-pentanone (MIBK)	0.0500	0.0419		mg/Kg		84	50 - 148	8	30
Acetone	0.0500	0.0494		mg/Kg		99	40 - 150	4	30
Benzene	0.0500	0.0435		mg/Kg		87	70 - 125	2	30
Bromodichloromethane	0.0500	0.0391		mg/Kg		78	67 - 129	3	30
Bromoform	0.0500	0.0363		mg/Kg		73	68 - 136	1	30
Bromomethane	0.0500	0.0361		mg/Kg		72	70 - 130	1	30
Carbon disulfide	0.0500	0.0430		mg/Kg		86	70 - 129	2	30
Carbon tetrachloride	0.0500	0.0393		mg/Kg		79	75 - 125	0	30
Chlorobenzene	0.0500	0.0447		mg/Kg		89	50 - 150	0	30
Chloroethane	0.0500	0.0331	*	mg/Kg		66	75 - 125	6	30
Chloroform	0.0500	0.0394		mg/Kg		79	57 - 135	1	30
Chloromethane	0.0500	0.0437		mg/Kg		87	70 - 125	3	30
cis-1,2-Dichloroethene	0.0500	0.0415		mg/Kg		83	70 - 125	1	30
cis-1,3-Dichloropropene	0.0500	0.0425		mg/Kg		85	70 - 125	1	30
Dibromochloromethane	0.0500	0.0394		mg/Kg		79	69 - 125	1	30
Ethylbenzene	0.0500	0.0446		mg/Kg		89	61 - 136	0	30
Methyl tert-butyl ether	0.0500	0.0405		mg/Kg		81	50 - 140	3	30
Methylene Chloride	0.0500	0.0416		mg/Kg		83	70 - 126	1	30
Styrene	0.0500	0.0435		mg/Kg		87	70 - 125	0	30
Tetrachloroethene	0.0500	0.0449		mg/Kg		90	70 - 124	1	30
Toluene	0.0500	0.0452		mg/Kg		90	70 - 125	0	30
trans-1,2-Dichloroethene	0.0500	0.0420		mg/Kg		84	70 - 125	0	30
trans-1,3-Dichloropropene	0.0500	0.0416		mg/Kg		83	70 - 125	0	30
Trichloroethene	0.0500	0.0441		mg/Kg		88	70 - 125	0	30
Vinyl acetate	0.0500	0.0334		mg/Kg		67	40 - 153	3	30
Vinyl chloride	0.0500	0.0413		mg/Kg		83	70 - 125	8	30
Xylenes, Total	0.100	0.0877		mg/Kg		88	53 - 147	0	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		70 - 134
4-Bromofluorobenzene (Surr)	94		75 - 131
Dibromofluoromethane	83		75 - 126
Toluene-d8 (Surr)	95		75 - 124

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-521351/1-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521351

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	<0.17		0.17	0.074	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Isophorone	<0.17		0.17	0.037	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Carbazole	<0.17		0.17	0.083	mg/Kg		12/18/19 16:01	12/23/19 19:17	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-521351/1-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521351

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		12/18/19 16:01	12/23/19 19:17	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		12/18/19 16:01	12/23/19 19:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol	164		31 - 166	12/18/19 16:01	12/23/19 19:17	1
Phenol-d5	134		30 - 153	12/18/19 16:01	12/23/19 19:17	1
Nitrobenzene-d5	106		37 - 147	12/18/19 16:01	12/23/19 19:17	1
2-Fluorobiphenyl	107		43 - 145	12/18/19 16:01	12/23/19 19:17	1
2,4,6-Tribromophenol	64		31 - 143	12/18/19 16:01	12/23/19 19:17	1
Terphenyl-d14	135		42 - 157	12/18/19 16:01	12/23/19 19:17	1

Lab Sample ID: LCS 500-521351/2-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521351

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Phenol	1.33	1.66	*	mg/Kg		125	56 - 122
Bis(2-chloroethyl)ether	1.33	1.35		mg/Kg		101	55 - 111
1,3-Dichlorobenzene	1.33	1.15		mg/Kg		86	65 - 124
1,4-Dichlorobenzene	1.33	1.18		mg/Kg		88	61 - 110
1,2-Dichlorobenzene	1.33	1.19		mg/Kg		90	62 - 110
2-Methylphenol	1.33	1.55		mg/Kg		116	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.19		mg/Kg		89	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.55		mg/Kg		117	56 - 118
Hexachloroethane	1.33	1.10		mg/Kg		83	60 - 114
2-Chlorophenol	1.33	1.29		mg/Kg		97	64 - 110
Nitrobenzene	1.33	1.56	*	mg/Kg		117	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.43		mg/Kg		108	60 - 112
1,2,4-Trichlorobenzene	1.33	1.32		mg/Kg		99	66 - 117
Isophorone	1.33	1.42		mg/Kg		106	55 - 110
2,4-Dimethylphenol	1.33	1.15		mg/Kg		86	60 - 110
Hexachlorobutadiene	1.33	1.33		mg/Kg		100	56 - 120
Naphthalene	1.33	1.28		mg/Kg		96	63 - 110
2,4-Dichlorophenol	1.33	1.23		mg/Kg		92	58 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521351/2-A

Matrix: Solid

Analysis Batch: 522137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 521351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	0.730		mg/Kg		55	30 - 150
2,4,6-Trichlorophenol	1.33	1.10		mg/Kg		83	57 - 120
2,4,5-Trichlorophenol	1.33	0.968		mg/Kg		73	50 - 120
Hexachlorocyclopentadiene	1.33	0.822		mg/Kg		62	10 - 133
2-Methylnaphthalene	1.33	1.32		mg/Kg		99	69 - 112
2-Nitroaniline	1.33	1.36		mg/Kg		102	57 - 124
2-Chloronaphthalene	1.33	1.28		mg/Kg		96	69 - 114
4-Chloro-3-methylphenol	1.33	1.06		mg/Kg		79	65 - 122
2,6-Dinitrotoluene	1.33	1.26		mg/Kg		95	70 - 123
2-Nitrophenol	1.33	1.24		mg/Kg		93	60 - 120
3-Nitroaniline	1.33	0.775		mg/Kg		58	40 - 122
Dimethyl phthalate	1.33	1.23		mg/Kg		92	69 - 116
2,4-Dinitrophenol	2.67	<0.67	*	mg/Kg		8	10 - 100
Acenaphthylene	1.33	1.30		mg/Kg		97	68 - 120
2,4-Dinitrotoluene	1.33	1.31		mg/Kg		98	69 - 124
Acenaphthene	1.33	1.30		mg/Kg		97	65 - 124
Dibenzofuran	1.33	1.33		mg/Kg		100	66 - 115
4-Nitrophenol	2.67	1.29		mg/Kg		48	30 - 122
Fluorene	1.33	1.32		mg/Kg		99	62 - 120
4-Nitroaniline	1.33	1.08		mg/Kg		81	60 - 160
4-Bromophenyl phenyl ether	1.33	1.32		mg/Kg		99	68 - 118
Hexachlorobenzene	1.33	1.37		mg/Kg		103	63 - 124
Diethyl phthalate	1.33	1.37		mg/Kg		103	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.28		mg/Kg		96	62 - 119
Pentachlorophenol	2.67	<0.67		mg/Kg		19	13 - 112
N-Nitrosodiphenylamine	1.33	1.35		mg/Kg		101	65 - 112
4,6-Dinitro-2-methylphenol	2.67	0.660	J	mg/Kg		25	10 - 110
Phenanthrene	1.33	1.36		mg/Kg		102	62 - 120
Anthracene	1.33	1.37		mg/Kg		103	70 - 114
Carbazole	1.33	1.46		mg/Kg		109	65 - 142
Di-n-butyl phthalate	1.33	1.27		mg/Kg		95	65 - 120
Fluoranthene	1.33	1.38		mg/Kg		103	62 - 120
Pyrene	1.33	1.25		mg/Kg		94	61 - 128
Butyl benzyl phthalate	1.33	1.14		mg/Kg		85	71 - 129
Benzo[a]anthracene	1.33	1.33		mg/Kg		100	67 - 122
Chrysene	1.33	1.24		mg/Kg		93	63 - 120
3,3'-Dichlorobenzidine	1.33	0.959		mg/Kg		72	35 - 128
Bis(2-ethylhexyl) phthalate	1.33	1.19		mg/Kg		89	72 - 131
Di-n-octyl phthalate	1.33	1.24		mg/Kg		93	68 - 134
Benzo[b]fluoranthene	1.33	1.36		mg/Kg		102	69 - 129
Benzo[k]fluoranthene	1.33	1.42		mg/Kg		107	68 - 127
Benzo[a]pyrene	1.33	1.36		mg/Kg		102	65 - 133
Indeno[1,2,3-cd]pyrene	1.33	1.56		mg/Kg		117	68 - 130
Dibenz(a,h)anthracene	1.33	1.63		mg/Kg		122	64 - 131
Benzo[g,h,i]perylene	1.33	1.62		mg/Kg		121	72 - 131
3 & 4 Methylphenol	1.33	1.23		mg/Kg		93	57 - 120

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-521351/2-A
Matrix: Solid
Analysis Batch: 522137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521351

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	134		31 - 166
Phenol-d5	116		30 - 153
Nitrobenzene-d5	96		37 - 147
2-Fluorobiphenyl	98		43 - 145
2,4,6-Tribromophenol	76		31 - 143
Terphenyl-d14	98		42 - 157

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-521131/1-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521131

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<2.0		2.0	0.39	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Arsenic	<1.0		1.0	0.34	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Barium	<1.0		1.0	0.11	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Beryllium	<0.40		0.40	0.093	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Boron	0.519	J	5.0	0.47	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Cadmium	0.0692	J	0.20	0.036	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Calcium	<20		20	3.4	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Chromium	<1.0		1.0	0.50	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Cobalt	<0.50		0.50	0.13	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Copper	<1.0		1.0	0.28	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Iron	<20		20	10	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Lead	<0.50		0.50	0.23	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Magnesium	<10		10	5.0	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Manganese	<1.0		1.0	0.15	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Nickel	<1.0		1.0	0.29	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Potassium	<50		50	18	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Selenium	<1.0		1.0	0.59	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Silver	0.130	J	0.50	0.13	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Sodium	<100		100	15	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Thallium	<1.0		1.0	0.50	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Vanadium	<0.50		0.50	0.12	mg/Kg		12/17/19 17:12	12/18/19 16:02	1
Zinc	<2.0		2.0	0.88	mg/Kg		12/17/19 17:12	12/18/19 16:02	1

Lab Sample ID: LCS 500-521131/2-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521131

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Antimony	50.0	48.9		mg/Kg		98	80 - 120
Arsenic	10.0	9.33		mg/Kg		93	80 - 120
Barium	200	191		mg/Kg		95	80 - 120
Beryllium	5.00	4.63		mg/Kg		93	80 - 120
Boron	100	86.9		mg/Kg		87	80 - 120
Cadmium	5.00	4.74		mg/Kg		95	80 - 120
Calcium	1000	928		mg/Kg		93	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-521131/2-A
Matrix: Solid
Analysis Batch: 521401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521131

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	20.0	19.5		mg/Kg		97	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Copper	25.0	23.9		mg/Kg		96	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Lead	10.0	9.37		mg/Kg		94	80 - 120
Magnesium	1000	894		mg/Kg		89	80 - 120
Manganese	50.0	46.9		mg/Kg		94	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Potassium	1000	944		mg/Kg		94	80 - 120
Selenium	10.0	8.84		mg/Kg		88	80 - 120
Silver	5.00	4.62		mg/Kg		92	80 - 120
Sodium	1000	980		mg/Kg		98	80 - 120
Thallium	10.0	9.13		mg/Kg		91	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	47.5		mg/Kg		95	80 - 120

Lab Sample ID: LCS 500-522245/2-A
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.430	J	mg/L		86	80 - 120
Beryllium	0.0500	0.0428		mg/L		86	80 - 120
Boron	1.00	0.844		mg/L		84	80 - 120
Cadmium	0.0500	0.0464		mg/L		93	80 - 120
Chromium	0.200	0.165		mg/L		83	80 - 120
Cobalt	0.500	0.447		mg/L		89	80 - 120
Iron	1.00	0.929		mg/L		93	80 - 120
Lead	0.100	0.0859		mg/L		86	80 - 120
Manganese	0.500	0.422		mg/L		84	80 - 120
Nickel	0.500	0.440		mg/L		88	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120
Silver	0.0500	0.0458		mg/L		92	80 - 120
Zinc	0.500	0.468	J	mg/L		94	80 - 120

Lab Sample ID: LCS 500-522365/2-A
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.100	0.0960		mg/L		96	80 - 120
Manganese	0.500	0.472		mg/L		94	80 - 120

Lab Sample ID: LB 500-521522/1-B
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522245

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 16:57	1

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-521522/1-B
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522245

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/24/19 06:24	12/24/19 16:57	1
Boron	<0.50		0.50	0.050	mg/L		12/24/19 06:24	12/24/19 16:57	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/24/19 06:24	12/24/19 16:57	1
Chromium	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Cobalt	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Iron	<0.40		0.40	0.20	mg/L		12/24/19 06:24	12/24/19 16:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 06:24	12/24/19 16:57	1
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Nickel	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Selenium	<0.050		0.050	0.020	mg/L		12/24/19 06:24	12/24/19 16:57	1
Silver	<0.025		0.025	0.010	mg/L		12/24/19 06:24	12/24/19 16:57	1
Zinc	<0.50		0.50	0.020	mg/L		12/24/19 06:24	12/24/19 16:57	1

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Barium	0.24	J	0.500	0.704		mg/L		93	75 - 125
Beryllium	<0.0040		0.0500	0.0474		mg/L		95	75 - 125
Boron	0.81	F1	1.00	1.50	F1	mg/L		69	75 - 125
Cadmium	<0.0050		0.0500	0.0466		mg/L		93	75 - 125
Chromium	<0.025		0.200	0.176		mg/L		88	75 - 125
Cobalt	0.041		0.500	0.490		mg/L		90	75 - 125
Iron	<0.40		1.00	0.950		mg/L		95	75 - 125
Lead	<0.0075		0.100	0.0839		mg/L		84	75 - 125
Manganese	2.0		0.500	2.62	4	mg/L		123	75 - 125
Nickel	0.076		0.500	0.519		mg/L		89	75 - 125
Selenium	<0.050		0.100	0.0932		mg/L		93	75 - 125
Silver	<0.025		0.0500	0.0505		mg/L		101	75 - 125
Zinc	0.076	J	0.500	0.510		mg/L		87	75 - 125

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
Barium	0.24	J	0.233	J	mg/L		2	20
Beryllium	<0.0040		<0.0040		mg/L		NC	20
Boron	0.81	F1	0.811		mg/L		0.1	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	<0.025		<0.025		mg/L		NC	20
Cobalt	0.041		0.0400		mg/L		2	20
Iron	<0.40		<0.40		mg/L		NC	20
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	2.0		1.96		mg/L		2	20
Nickel	0.076		0.0756		mg/L		0.9	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522413

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Zinc	0.076	J	0.0765	J	mg/L		0.2	20

Lab Sample ID: LB 500-522173/1-B
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 522365

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/24/19 15:32	12/26/19 08:39	1
Manganese	<0.025		0.025	0.010	mg/L		12/24/19 15:32	12/26/19 08:39	1

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: SPLP East
Prep Batch: 522365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	<0.0075		0.100	0.101		mg/L		101	75 - 125
Manganese	0.012	J	0.500	0.510		mg/L		99	75 - 125

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522543

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: SPLP East
Prep Batch: 522365

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	<0.0075		<0.0075		mg/L		NC	20
Manganese	0.012	J	0.0126	J	mg/L		4	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-522245/2-A
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.522		mg/L		104	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LB 500-521522/1-B
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522245

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/24/19 06:24	12/26/19 13:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/24/19 06:24	12/26/19 13:08	1

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0060		0.500	0.514		mg/L		103	75 - 125

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QC Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-174843-8 MS
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	<0.0020		0.100	0.106		mg/L		106	75 - 125

Lab Sample ID: 500-174843-8 DU
Matrix: Solid
Analysis Batch: 522587

Client Sample ID: 2615V2-262-B01 (39-47)
Prep Type: TCLP
Prep Batch: 522245

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0060		<0.0060		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-522310/12-A
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:28	1

Lab Sample ID: LCS 500-522310/15-A
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00204		mg/L		102	80 - 120

Lab Sample ID: LB 500-521522/1-C
Matrix: Solid
Analysis Batch: 522524

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 522310

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/24/19 09:15	12/26/19 09:31	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-521249/12-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00592	J	0.017	0.0056	mg/Kg		12/18/19 14:15	12/19/19 07:03	1

Lab Sample ID: LCS 500-521249/13-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.177		mg/Kg		106	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Ecology and Environment, Inc.
 Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: MB 500-521259/12-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 521259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		12/18/19 14:15	12/19/19 08:04	1

Lab Sample ID: LCS 500-521259/13-A
Matrix: Solid
Analysis Batch: 521492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 521259
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.167	0.166		mg/Kg		100	80 - 120



Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:47	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:06	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:13	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:35	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (0-5)

Lab Sample ID: 500-174843-1

Date Collected: 12/10/19 13:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 15:39	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	522273	12/24/19 11:07	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:42	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 10:58	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 07:54	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:51	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:10	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:15	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:37	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (5-10)

Lab Sample ID: 500-174843-2

Date Collected: 12/10/19 13:25

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 16:04	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 21:01	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:46	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:02	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 07:56	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:55	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:15	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:18	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:39	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (10-15)

Lab Sample ID: 500-174843-3

Date Collected: 12/10/19 13:30

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 16:30	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 21:31	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:50	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:06	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 07:58	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 08:59	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:19	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:20	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:41	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (15-23)

Lab Sample ID: 500-174843-4

Date Collected: 12/10/19 13:40

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 16:55	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 18:34	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:54	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:10	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:00	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:03	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:32	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:22	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 09:59	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (23-31)

Lab Sample ID: 500-174843-5

Date Collected: 12/10/19 13:50

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 17:21	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 19:04	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 16:58	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 11:14	EEN	TAL CHI
Total/NA	Prep	7471B			521249	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:02	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:07	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:37	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:24	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 10:01	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (31-39)

Lab Sample ID: 500-174843-6

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 17:46	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 19:33	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 17:02	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 12:53	EEN	TAL CHI
Total/NA	Prep	7471B			521259	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:08	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:11	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:41	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:27	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 10:02	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Client Sample ID: 2615V2-262-B01 (31-39)D

Lab Sample ID: 500-174843-7

Date Collected: 12/10/19 14:00

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 18:12	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 20:03	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 17:06	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 13:01	EEN	TAL CHI
Total/NA	Prep	7471B			521259	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:10	MJG	TAL CHI

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			522173	12/23/19 12:00	GCA	TAL CHI
SPLP East	Prep	3010A			522365	12/24/19 15:32	BDE	TAL CHI
SPLP East	Analysis	6010B		1	522543	12/26/19 09:15	JEF	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6010B		1	522413	12/24/19 17:46	EEN	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	3010A			522245	12/24/19 06:24	LMN	TAL CHI
TCLP	Analysis	6020A		1	522587	12/26/19 13:29	FXG	TAL CHI
TCLP	Leach	1311			521522	12/19/19 12:15	GCA	TAL CHI
TCLP	Prep	7470A			522310	12/24/19 09:15	MJG	TAL CHI
TCLP	Analysis	7470A		1	522524	12/26/19 10:04	MJG	TAL CHI
Total/NA	Analysis	Moisture		1	521013	12/17/19 10:22	LWN	TAL CHI

Client Sample ID: 2615V2-262-B01 (39-47)

Lab Sample ID: 500-174843-8

Date Collected: 12/10/19 14:15

Matrix: Solid

Date Received: 12/10/19 15:25

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			520652	12/11/19 19:47	WRE	TAL CHI
Total/NA	Analysis	8260B		1	521439	12/19/19 18:37	PMF	TAL CHI
Total/NA	Prep	3541			521351	12/18/19 16:01	ACK	TAL CHI
Total/NA	Analysis	8270D		1	521902	12/21/19 20:32	AJD	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		1	521401	12/18/19 17:10	EEN	TAL CHI
Total/NA	Prep	3050B			521131	12/17/19 17:12	BDE	TAL CHI
Total/NA	Analysis	6010B		10	521527	12/19/19 13:05	EEN	TAL CHI
Total/NA	Prep	7471B			521259	12/18/19 14:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	521492	12/19/19 08:17	MJG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO 047

Job ID: 500-174843-1

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
7470A	7470A	Solid	Mercury
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENT/

2417 Bond Street, University Park, IL
 Phone: 708.534.5200 Fax: 708.5



500-174843 COC

Report To (optional)
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

Bill To (optional)
 Contact: Dean Tiebout
 Company: E+E
 Address: _____
 Address: _____
 Phone: _____
 Fax: _____
 PO#/Reference#: _____

Chain of Custody Record

Lab Job #: 500-174843
 Chain of Custody Number: _____
 Page 1 of 1
 Temperature °C of Cooler: 5.4

Client		Client Project #		Preservative		Parameter		Preservative Key		
<u>EDI</u>		<u>0945-028</u>						1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name		Lab Project #		# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TELP METALS	
<u>IDOT 176-001 WO 47E</u>										
Project Location/State		Lab Project #		Date	Time	X	X	X	X	
<u>Chicago, IL</u>										
Sampler		Lab PM		Comments						
<u>Mike Fischer</u>		<u>Richard Wright</u>								
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	VOCs	SVOCs	TOTAL METALS	TELP METALS
<u>1</u>		<u>2615V2-262-001(0-5)</u>	<u>12-10-19</u>	<u>1315</u>	<u>5</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>2</u>		<u>(5-10)</u>		<u>1325</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>3</u>		<u>(10-15)</u>		<u>1330</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>4</u>		<u>(15-23)</u>		<u>1340</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>5</u>		<u>(23-31)</u>		<u>1350</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>6</u>		<u>(31-39)</u>		<u>1400</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>7</u>		<u>(31-39)D</u>		<u>1400</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>8</u>		<u>(39-47)</u>		<u>1415</u>	<u>1</u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>

Turnaround Time Required (Business Days)

1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other

Sample Disposal

Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u>	Company <u>EDI</u>	Date <u>12/10/19</u>	Time <u>1430</u>	Received By <u>[Signature]</u>	Company <u>EA</u>	Date <u>12/10/19</u>	Time <u>1430</u>
Relinquished By <u>P. Neal</u>	Company <u>A</u>	Date <u>12/10/19</u>	Time <u>1525</u>	Received By <u>[Signature]</u>	Company <u>A</u>	Date <u>12/10/19</u>	Time <u>1525</u>

Lab Courier: JA
 Shipped: _____
 Hand Delivered: _____

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments: _____

Lab Comments: _____

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-174843-1

Login Number: 174843

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

