Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
6500-6700 blocks S. Grant Highway (ISGS #3696-2)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.23427 (Decimal Degrees) Longitude: - 88.5761 (-Decimal Degrees)

Identify how the lat/long data were determined:

○ GPS ⊘ Map Interpolation ○ Photo Interpolation ○ Survey ○ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23427 Longitude: - 88.57610

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-02-B01 through 2790V-02-B04 was sampled within the construction zone adjacent to ISGS #3696-2 (2790V-2, Agricultural Land). Refer to PSI Report for ISGS #3696-2 (2790V-2, Agricultural Land) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144629-1.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

P.E or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-2 (Agricultural Land)				Comparison Criteria					
BORING	2790V-02-B01	2790V-02-B02	2790V-02-B03	2790V-02-B04	MACs			TACO		
SAMPLE	2790V-02-B01 (0-3)	2790V-02-B02 (0-3)	2790V-02-B03 (0-3)	2790V-02-B04 (0-2)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-3	0-3	0-3	0-2						
pH	8.8	8.5	8.2	8.1						
PID	--	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)										
2-Butanone (MEK)	ND U	ND U	ND U	**0.0045**	--	--	--	--	--	--
Acetone	ND U	**0.013 J**	**0.021**	**0.036**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)										
Acenaphthylene	ND U	ND U	ND U	**0.0095 J**	--	--	--	--	--	--
Anthracene	ND U	**0.0072 J**	**0.0085 J**	**0.0092 J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.022 J**	**0.042**	**0.04**	**0.043**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.039**	**0.052**	**0.044**	**0.055**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.053**	**0.098**	**0.086 J**	**0.11**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.023 J**	**0.032 J**	**0.028 J**	**0.026 J**	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.016 J**	**0.03 J**	**0.027 J**	**0.031 J**	9	--	--	9	1,700	--
Chrysene	**0.026 J**	**0.053**	**0.048**	**0.053**	88	--	--	88	17,000	--
Fluoranthene	**0.034 J**	**0.091**	**0.096**	**0.091**	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.019 J**	**0.028 J**	**0.025 J**	**0.023 J**	0.9	1.6	0.9	1.6	170	--
Phenanthrene	**0.013 J**	**0.032 J**	**0.04**	**0.038**	--	--	--	--	--	--
Pyrene	**0.029 J**	**0.066**	**0.068**	**0.07**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	**0.52 J**	**0.38 J**	**0.41 J**	**0.41 J**	5	--	--	31	82	--
Arsenic	**1.9**	**2**	**3.2 J**	**1.9**	11.3	13	--	13	61	--
Barium	**35**	**22**	**15**	**60**	1,500	--	--	5,500	14,000	--
Beryllium	**0.43**	**0.21**	**0.21**	**0.49**	22	--	--	160	410	--
Boron	**8.2**	**4.6**	**5.1**	**5.8**	40	--	--	16,000	41,000	--
Cadmium	ND	**0.31**	**0.28**	ND	5.2	--	--	78	200	--
Calcium	**90,000**	**89,000**	**110,000**	**26,000**	--	--	--	--	--	--
Chromium	**14**	**12**	**6.8**	**14**	21	--	--	230	690	--
Cobalt	**5.9**	**3.3**	**3.1 J**	**6.5**	20	--	--	4,700	12,000	--
Copper	**18**	**13**	**12 J**	**11**	2,900	--	--	2,900	8,200	--
Iron	**11,000**	**6,800**	**7,100 J**	**11,000**	15,000	15,900	--	--	--	--
Lead	**82**	**100**	**46**	**98**	107	--	--	400	700	--
Magnesium	**31,000**	**36,000**	**47,000**	**16,000**	325,000	--	--	--	730,000	--
Manganese	**210**	**200**	**210 J**	**350**	630	636	--	1,600	4,100	--
Mercury	**0.018**	**0.015 J**	**0.0059 J**	**0.029**	0.89	--	--	10	0.1	--
Nickel	**13**	**8.1**	**8.6 J**	**13**	100	--	--	1,600	4,100	--
Potassium	**1,300**	**570**	**560 J**	**1,100**	--	--	--	--	--	--
Selenium	ND U	ND U	ND UJ	ND U	1.3	--	--	390	1,000	--
Silver	**0.11 J**	ND U	ND U	**0.14 J**	4.4	--	--	390	1,000	--
Sodium	**1,100**	**300**	**210**	**2,000**	--	--	--	--	--	--
Vanadium	**18**	**14**	**14**	**24**	550	--	--	550	1,400	--
Zinc	**53**	**51**	**36**	**60**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	**0.33 J**	**0.26 J**	**0.19 J**	**0.34 J**	--	--	--	--	--	2
Boron	ND U	ND U	ND U	**0.072 J**	--	--	--	--	--	2
Cadmium	ND U	**0.0032 J**	**0.003 J**	ND U	--	--	--	--	--	0.005
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	**0.0086 L**	ND U	**0.058 L**	--	--	--	--	--	0.0075
Manganese	**0.025**	**0.2 L**	**0.56 L**	**3.8 L**	--	--	--	--	--	0.15
Selenium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.05
Zinc	ND U	**0.055 J**	**0.049 J**	**0.12 J**	--	--	--	--	--	5
SPLP Metals (mg/L)										
Lead	NA	**0.1 L**	NA	**0.84 L**	--	--	--	--	--	0.0075
Manganese	NA	**0.22 L**	**0.021 J**	**1 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144629-1
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:57:54 AM

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

Table of Contents

Job ID: 500-144629-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144629-1

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 431344 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The method blank for preparation batch 500-430629 and analytical batch 500-430740 contained Di-n-butyl phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for two analytes: 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol. Data has been qualified and reported. (500-144629-E-1-F MS) and (500-144629-E-1-G MSD)

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

Metals
Method(s) 6010B: The continuing calibration blanks (CCB) contained Selenium above the reporting limit (RL). The sample results2790V-02-B03 (0-3) (500-144629-1), 2790V-02-B02 (0-3) (500-144629-2), 2790V-02-B01 (0-3) (500-144629-3), 2790V-02-B04 (0-2) (500-144629-4) and 2790V-02-B05 (0-6) (500-144629-5) associated with this CCB was below the RL; therefore, re-analysis of samples was not performed.

Method(s) 245.1, 7470A: The continuing calibration verification (CCV) associated with batch 500-431435 recovered above the upper control limit for Mercury The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 2790V-02-B03 (0-3) (500-144629-1), 2790V-02-B02 (0-3) (500-144629-2), 2790V-02-B01 (0-3) (500-144629-3), 2790V-02-B04 (0-2) (500-144629-4), and 2790V-02-B05 (0-6) (500-144629-5).

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-1

Client Sample ID: 2790V-02-B03 (0-3) — Lab Sample ID: 500-144629-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.021		0.016	0.0068	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.040		0.035	0.0049	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0085	J	0.035	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.096		0.035	0.0065	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.068		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.040		0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.048		0.035	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.086	F1	0.035	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.027	J	0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.044		0.035	0.0068	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.025	J F1	0.035	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.028	J F1	0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.41	J F1	0.96	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.2	F1	0.48	0.16	mg/Kg	1	☼	6010B	Total/NA
Barium	15		0.48	0.055	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.21		0.19	0.045	mg/Kg	1	☼	6010B	Total/NA
Boron	5.1	B	2.4	0.22	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28	B	0.096	0.017	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	96	16	mg/Kg	10	☼	6010B	Total/NA
Chromium	6.8		0.48	0.24	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.1		0.24	0.063	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.48	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	7100		9.6	5.0	mg/Kg	1	☼	6010B	Total/NA
Lead	46	B	0.24	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	47000	F2	4.8	2.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.48	0.070	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.6		0.48	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	560	F1	24	8.5	mg/Kg	1	☼	6010B	Total/NA
Sodium	210		48	7.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Zinc	36		0.96	0.42	mg/Kg	1	☼	6010B	Total/NA
Barium	0.19	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.56		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.049	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.021	J	0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0059	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-02-B02 (0-3) — Lab Sample ID: 500-144629-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.032	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0072	J	0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.091		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.066		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.042		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.053		0.036	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.098		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Client Sample ID: 2790V-02-B02 (0-3) (Continued) — Lab Sample ID: 500-144629-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.030	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.052		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.028	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.032	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.38	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.0		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	22		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.21		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	89000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	12		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.3		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	6800		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	100	B	0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	36000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	200		0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.1		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	570		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	300		52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	51		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.26	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0032	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.0086		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.20		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.055	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.10		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.22		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.015	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-02-B01 (0-3) — Lab Sample ID: 500-144629-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.013	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.034	J	0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.029	J	0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.022	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.026	J	0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.053		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.016	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.039		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.019	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.023	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.52	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.9		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.52	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-02-B01 (0-3) (Continued)

Lab Sample ID: 500-144629-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	8.2	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	90000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.9		0.26	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		10	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	82	B	0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.52	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		26	9.3	mg/Kg	1	☼	6010B	Total/NA
Silver	0.11	J	0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		52	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.025		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.018		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-02-B04 (0-2)

Lab Sample ID: 500-144629-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.036		0.016	0.0070	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0045		0.0040	0.0018	mg/Kg	1	☼	8260B	Total/NA
Acenaphthylene	0.0095	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.038		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0092	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.091		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.070		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.043		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.053		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.11		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.031	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.055		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.023	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.026	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.41	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.9		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	60		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	5.8	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.5		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	98	B	0.27	0.12	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-1

Client Sample ID: 2790V-02-B04 (0-2) (Continued) — Lab Sample ID: 500-144629-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	16000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	350		0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.14	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	2000		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	60		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.058		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.8		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.12	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.84		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144629-1	2790V-02-B03 (0-3)	Solid	05/01/18 09:55	05/01/18 16:50
500-144629-2	2790V-02-B02 (0-3)	Solid	05/01/18 10:05	05/01/18 16:50
500-144629-3	2790V-02-B01 (0-3)	Solid	05/01/18 12:00	05/01/18 16:50
500-144629-4	2790V-02-B04 (0-2)	Solid	05/01/18 13:15	05/01/18 16:50

Client Sample ID: 2790V-02-B03 (0-3)
Date Collected: 05/01/18 09:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-1
Matrix: Solid
Percent Solids: 95.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.021**		0.016	0.0068	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,1-Dichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/01/18 17:47*	*05/09/18 17:45*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/01/18 17:47*	*05/09/18 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/01/18 17:47*	*05/09/18 17:45*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 17:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.078	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.052	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1

Client Sample ID: 2790V-02-B03 (0-3)
Date Collected: 05/01/18 09:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-1
Matrix: Solid
Percent Solids: 95.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
N-Nitrosodi-n-propylamine	<0.070		0.070	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2-Methylnaphthalene	<0.070		0.070	0.0064	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,4-Dinitrophenol	<0.70	F1	0.70	0.61	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
4,6-Dinitro-2-methylphenol	<0.70	F1	0.70	0.28	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Phenanthrene	**0.040**		0.035	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Anthracene	**0.0085**	**J**	0.035	0.0058	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Carbazole	<0.18		0.18	0.087	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Fluoranthene	**0.096**		0.035	0.0065	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Pyrene	**0.068**		0.035	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Butyl benzyl phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Benzo[a]anthracene	**0.040**		0.035	0.0047	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1

Client Sample ID: 2790V-02-B03 (0-3)
Date Collected: 05/01/18 09:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-1
Matrix: Solid
Percent Solids: 95.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.048**		0.035	0.0095	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Benzo[b]fluoranthene	**0.086**	**F1**	0.035	0.0075	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Benzo[k]fluoranthene	**0.027**	**J**	0.035	0.010	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Benzo[a]pyrene	**0.044**		0.035	0.0068	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Indeno[1,2,3-cd]pyrene	**0.025**	**J F1**	0.035	0.0090	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Dibenz(a,h)anthracene	<0.035	F1	0.035	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
Benzo[g,h,i]perylene	**0.028**	**J F1**	0.035	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1
3 & 4 Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*105*		*46 - 133*	*05/04/18 06:47*	*05/05/18 03:32*	*1*
Phenol-d5	*110*		*46 - 125*	*05/04/18 06:47*	*05/05/18 03:32*	*1*
Nitrobenzene-d5	*95*		*41 - 120*	*05/04/18 06:47*	*05/05/18 03:32*	*1*
2-Fluorobiphenyl	*85*		*44 - 121*	*05/04/18 06:47*	*05/05/18 03:32*	*1*
2,4,6-Tribromophenol	*101*		*25 - 139*	*05/04/18 06:47*	*05/05/18 03:32*	*1*
Terphenyl-d14	*89*		*35 - 160*	*05/04/18 06:47*	*05/05/18 03:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.41**	**J F1**	0.96	0.19	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Arsenic	**3.2**	**F1**	0.48	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Barium	**15**		0.48	0.055	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Beryllium	**0.21**		0.19	0.045	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Boron	**5.1**	**B**	2.4	0.22	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Cadmium	**0.28**	**B**	0.096	0.017	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Calcium	**110000**	**B**	96	16	mg/Kg	☼	05/03/18 08:10	05/05/18 00:18	10
Chromium	**6.8**		0.48	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Cobalt	**3.1**		0.24	0.063	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Copper	**12**		0.48	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Iron	**7100**		9.6	5.0	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Lead	**46**	**B**	0.24	0.11	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Magnesium	**47000**	**F2**	4.8	2.4	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Manganese	**210**		0.48	0.070	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Nickel	**8.6**		0.48	0.14	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Potassium	**560**	**F1**	24	8.5	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Selenium	<0.48	F1	0.48	0.28	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Silver	<0.24		0.24	0.062	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Sodium	**210**		48	7.1	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Thallium	<0.48	F1	0.48	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Vanadium	**14**		0.24	0.057	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1
Zinc	**36**		0.96	0.42	mg/Kg	☼	05/03/18 08:10	05/04/18 02:30	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.19**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 00:29	1
Boron	<0.50		0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:29	1

Client Sample ID: 2790V-02-B03 (0-3)
Date Collected: 05/01/18 09:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-1
Matrix: Solid
Percent Solids: 95.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0030**	**J**	0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 00:29	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:29	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:29	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 00:29	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 00:29	1
Manganese	**0.56**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:29	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:29	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 00:29	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:29	1
Zinc	**0.049**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 00:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.021**	**J**	0.025	0.010	mg/L		05/08/18 16:25	05/10/18 05:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0059**	**J**	0.017	0.0058	mg/Kg	☼	05/08/18 17:30	05/09/18 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.2**		0.20	0.20	SU			05/08/18 16:26	1

Client Sample ID: 2790V-02-B02 (0-3)
Date Collected: 05/01/18 10:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-2
Matrix: Solid
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.013**	**J**	0.016	0.0071	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/01/18 17:47*	*05/09/18 18:14*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/01/18 17:47*	*05/09/18 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/01/18 17:47*	*05/09/18 18:14*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 18:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1

Client Sample ID: 2790V-02-B02 (0-3)
Date Collected: 05/01/18 10:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-2
Matrix: Solid
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Phenanthrene	**0.032**	**J**	0.036	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Anthracene	**0.0072**	**J**	0.036	0.0060	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Fluoranthene	**0.091**		0.036	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Pyrene	**0.066**		0.036	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Benzo[a]anthracene	**0.042**		0.036	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1

Client Sample ID: 2790V-02-B02 (0-3)
Date Collected: 05/01/18 10:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-2
Matrix: Solid
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.053**		0.036	0.0098	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Benzo[b]fluoranthene	**0.098**		0.036	0.0078	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Benzo[k]fluoranthene	**0.030**	**J**	0.036	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Benzo[a]pyrene	**0.052**		0.036	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Indeno[1,2,3-cd]pyrene	**0.028**	**J**	0.036	0.0094	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
Benzo[g,h,i]perylene	**0.032**	**J**	0.036	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*108*		*46 - 133*	*05/04/18 06:47*	*05/05/18 03:59*	*1*
Phenol-d5	*113*		*46 - 125*	*05/04/18 06:47*	*05/05/18 03:59*	*1*
Nitrobenzene-d5	*99*		*41 - 120*	*05/04/18 06:47*	*05/05/18 03:59*	*1*
2-Fluorobiphenyl	*91*		*44 - 121*	*05/04/18 06:47*	*05/05/18 03:59*	*1*
2,4,6-Tribromophenol	*106*		*25 - 139*	*05/04/18 06:47*	*05/05/18 03:59*	*1*
Terphenyl-d14	*90*		*35 - 160*	*05/04/18 06:47*	*05/05/18 03:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.38**	**J**	1.0	0.20	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Arsenic	**2.0**		0.52	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Barium	**22**		0.52	0.059	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Beryllium	**0.21**		0.21	0.049	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Boron	**4.6**	**B**	2.6	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Cadmium	**0.31**	**B**	0.10	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Calcium	**89000**	**B**	100	18	mg/Kg	☼	05/03/18 08:10	05/05/18 00:38	10
Chromium	**12**		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Cobalt	**3.3**		0.26	0.068	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Copper	**13**		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Iron	**6800**		10	5.4	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Lead	**100**	**B**	0.26	0.12	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Magnesium	**36000**		5.2	2.6	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Manganese	**200**		0.52	0.075	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Nickel	**8.1**		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Potassium	**570**		26	9.2	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Sodium	**300**		52	7.7	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Vanadium	**14**		0.26	0.061	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1
Zinc	**51**		1.0	0.46	mg/Kg	☼	05/03/18 08:10	05/04/18 02:58	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.26**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 00:33	1
Boron	<0.50		0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:33	1

Client Sample ID: 2790V-02-B02 (0-3)
Date Collected: 05/01/18 10:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-2
Matrix: Solid
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0032**	**J**	0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 00:33	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:33	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:33	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 00:33	1
Lead	**0.0086**		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 00:33	1
Manganese	**0.20**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:33	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:33	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 00:33	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:33	1
Zinc	**0.055**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 00:33	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.10**		0.0075	0.0075	mg/L		05/08/18 16:25	05/10/18 05:56	1
Manganese	**0.22**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 05:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.018	0.0060	mg/Kg	☼	05/08/18 17:30	05/09/18 12:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.5**		0.20	0.20	SU			05/08/18 16:31	1

Client Sample ID: 2790V-02-B01 (0-3)
Date Collected: 05/01/18 12:00
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-3
Matrix: Solid
Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/01/18 17:47*	*05/09/18 18:42*	*1*
Dibromofluoromethane	*108*		*75 - 126*	*05/01/18 17:47*	*05/09/18 18:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*05/01/18 17:47*	*05/09/18 18:42*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 18:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1

Client Sample ID: 2790V-02-B01 (0-3)
Date Collected: 05/01/18 12:00
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-3
Matrix: Solid
Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Phenanthrene	**0.013**	**J**	0.036	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Fluoranthene	**0.034**	**J**	0.036	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Pyrene	**0.029**	**J**	0.036	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Benzo[a]anthracene	**0.022**	**J**	0.036	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1

Client Sample ID: 2790V-02-B01 (0-3)
Date Collected: 05/01/18 12:00
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-3
Matrix: Solid
Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.026**	**J**	0.036	0.0099	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Benzo[b]fluoranthene	**0.053**		0.036	0.0078	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Benzo[k]fluoranthene	**0.016**	**J**	0.036	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Benzo[a]pyrene	**0.039**		0.036	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Indeno[1,2,3-cd]pyrene	**0.019**	**J**	0.036	0.0094	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
Benzo[g,h,i]perylene	**0.023**	**J**	0.036	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*111*		*46 - 133*	*05/04/18 06:47*	*05/05/18 04:26*	*1*
Phenol-d5	*117*		*46 - 125*	*05/04/18 06:47*	*05/05/18 04:26*	*1*
Nitrobenzene-d5	*100*		*41 - 120*	*05/04/18 06:47*	*05/05/18 04:26*	*1*
2-Fluorobiphenyl	*89*		*44 - 121*	*05/04/18 06:47*	*05/05/18 04:26*	*1*
2,4,6-Tribromophenol	*93*		*25 - 139*	*05/04/18 06:47*	*05/05/18 04:26*	*1*
Terphenyl-d14	*92*		*35 - 160*	*05/04/18 06:47*	*05/05/18 04:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.52**	**J**	1.0	0.20	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Arsenic	**1.9**		0.52	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Barium	**35**		0.52	0.060	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Beryllium	**0.43**		0.21	0.049	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Boron	**8.2**	**B**	2.6	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Cadmium	**0.25**	**B**	0.10	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Calcium	**90000**	**B**	100	18	mg/Kg	☼	05/03/18 08:10	05/05/18 00:42	10
Chromium	**14**		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Cobalt	**5.9**		0.26	0.069	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Copper	**18**		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Iron	**11000**		10	5.5	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Lead	**82**	**B**	0.26	0.12	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Magnesium	**31000**		5.2	2.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Manganese	**210**		0.52	0.076	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Nickel	**13**		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Potassium	**1300**		26	9.3	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Silver	**0.11**	**J**	0.26	0.068	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Sodium	**1100**		52	7.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Vanadium	**18**		0.26	0.062	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1
Zinc	**53**		1.0	0.46	mg/Kg	☼	05/03/18 08:10	05/04/18 03:02	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.33**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 00:37	1
Boron	<0.50		0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:37	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-1

Client Sample ID: 2790V-02-B01 (0-3)
Date Collected: 05/01/18 12:00
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-3
Matrix: Solid
Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 00:37	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:37	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:37	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 00:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 00:37	1
Manganese	**0.025**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:37	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:37	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 00:37	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:37	1
Zinc	<0.50		0.50	0.020	mg/L		05/08/18 08:45	05/09/18 00:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:28	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.017	0.0057	mg/Kg	☼	05/08/18 17:30	05/09/18 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/08/18 16:35	1

Client Sample ID: 2790V-02-B04 (0-2)
Date Collected: 05/01/18 13:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-4
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.036**		0.016	0.0070	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
2-Butanone (MEK)	**0.0045**		0.0040	0.0018	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 131*	*05/01/18 17:47*	*05/09/18 19:11*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/01/18 17:47*	*05/09/18 19:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*05/01/18 17:47*	*05/09/18 19:11*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 19:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1

Client Sample ID: 2790V-02-B04 (0-2)
Date Collected: 05/01/18 13:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-4
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Acenaphthylene	**0.0095**	**J**	0.037	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Phenanthrene	**0.038**		0.037	0.0052	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Anthracene	**0.0092**	**J**	0.037	0.0062	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Fluoranthene	**0.091**		0.037	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Pyrene	**0.070**		0.037	0.0074	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Benzo[a]anthracene	**0.043**		0.037	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1

Client Sample ID: 2790V-02-B04 (0-2)
Date Collected: 05/01/18 13:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-4
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.053**		0.037	0.010	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Benzo[b]fluoranthene	**0.11**		0.037	0.0080	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Benzo[k]fluoranthene	**0.031**	**J**	0.037	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Benzo[a]pyrene	**0.055**		0.037	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Indeno[1,2,3-cd]pyrene	**0.023**	**J**	0.037	0.0096	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
Benzo[g,h,i]perylene	**0.026**	**J**	0.037	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 08:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*112*		*46 - 133*	*05/04/18 06:47*	*05/05/18 08:30*	*1*
Phenol-d5	*118*		*46 - 125*	*05/04/18 06:47*	*05/05/18 08:30*	*1*
Nitrobenzene-d5	*102*		*41 - 120*	*05/04/18 06:47*	*05/05/18 08:30*	*1*
2-Fluorobiphenyl	*92*		*44 - 121*	*05/04/18 06:47*	*05/05/18 08:30*	*1*
2,4,6-Tribromophenol	*109*		*25 - 139*	*05/04/18 06:47*	*05/05/18 08:30*	*1*
Terphenyl-d14	*103*		*35 - 160*	*05/04/18 06:47*	*05/05/18 08:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.41**	**J**	1.1	0.21	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Arsenic	**1.9**		0.54	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Barium	**60**		0.54	0.062	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Beryllium	**0.49**		0.22	0.051	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Boron	**5.8**	**B**	2.7	0.25	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Calcium	**26000**	**B**	11	1.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Chromium	**14**		0.54	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Cobalt	**6.5**		0.27	0.071	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Copper	**11**		0.54	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Iron	**11000**		11	5.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Lead	**98**	**B**	0.27	0.12	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Magnesium	**16000**		5.4	2.7	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Manganese	**350**		0.54	0.078	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Nickel	**13**		0.54	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Potassium	**1100**		27	9.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Silver	**0.14**	**J**	0.27	0.070	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Sodium	**2000**		54	8.0	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Vanadium	**24**		0.27	0.064	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1
Zinc	**60**		1.1	0.47	mg/Kg	☼	05/03/18 08:10	05/04/18 03:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 00:53	1
Boron	**0.072**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 00:53	1

Client Sample ID: 2790V-02-B04 (0-2)
Date Collected: 05/01/18 13:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-4
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 00:53	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:53	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:53	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 00:53	1
Lead	**0.058**		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 00:53	1
Manganese	**3.8**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:53	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:53	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 00:53	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 00:53	1
Zinc	**0.12**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 00:53	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.84**		0.0075	0.0075	mg/L		05/08/18 16:25	05/10/18 06:04	1
Manganese	**1.0**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:28	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**		0.017	0.0056	mg/Kg	☼	05/08/18 17:30	05/09/18 13:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.1**		0.20	0.20	SU			05/08/18 16:40	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

(optional)
Report To
Contact: D. Tizzoni
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144629

Chain of Custody Number:

Page 1 of 4

Temperature °C of Cooler: 3.3

Client: EXE	Client Project #: 1009341.0041.02
Project Name: FAP 525 (US20)	
Project Location/State: McHenry Co, IL	Lab Project #:
Sampler: E Fisher	Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TAL P/SPLP total Metals	% solids pH						Comments
1		2790V-02-B03(0-3)	5-1-18	0955	2	S		X	X	X	X						
2		2790V-02-B02(0-3)		1005	2	S		X	X	X	X						
3		2790V-02-B01(0-3)		1200	2	S		X	X	X	X						
4		2790V-02-B04(0-2)		1315	2	S		X	X	X	X						
5		2790V-02-B05(0-6)		1330	2	S		X	X	X	X						

500-144629 COC

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1		EXE	5/1/18	1510		TA	5/1/18	1510
2		TA	5/1/18	1650		TA-IME	05/01/18	1650
3								

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144629-1

Login Number: 144629
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
19324 E. Grant Highway (ISGS #3696-4)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.23408 (Decimal Degrees) Longitude: - 88.5754 (-Decimal Degrees)

Identify how the lat/long data were determined:

○ GPS ⊘ Map Interpolation ○ Photo Interpolation ○ Survey ○ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23408 Longitude: - 88.57540

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Location 2790V-04-B01 was sampled within the construction zone adjacent to ISGS #3696-4 (2790V-4, Residence). Refer to PSI Report for ISGS #3696-4 (2790V-4, Residence) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144627-2.

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

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

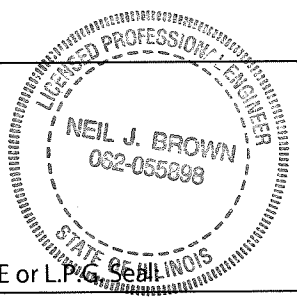
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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

Neil J. Brown
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

1/27/2020
Date:



P.E or L.P.G. Seal

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-4 (Residence)		Comparison Criteria					
BORING	2790V-04-B01		MACs			TACO		
SAMPLE	2790V-04-B01 (0-6)							
MATRIX	Soil							
DEPTH (feet)	0-6							
pH	8.5		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
PID	--							
VOCs (None Detected)								
SVOCs (mg/kg)								
2-Methylnaphthalene	ND	U	--	--	--	--	--	--
Acenaphthene	**0.01**	**J**	570	--	--	4,700	120,000	--
Acenaphthylene	**0.0082**	**J**	--	--	--	--	--	--
Anthracene	**0.049**		12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.23**		0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.33**	†	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.48**		0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.44**		--	--	--	--	--	--
Benzo(k)fluoranthene	**0.17**		9	--	--	9	1,700	--
Chrysene	**0.28**		88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND	U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	**0.49**		3,100	--	--	3,100	82,000	--
Fluorene	**0.013**	**J**	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.33**		0.9	1.6	0.9	1.6	170	--
Naphthalene	ND	U	1.8	--	--	170	1.8	--
Phenanthrene	**0.23**		--	--	--	--	--	--
Pyrene	**0.47**		2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	**0.26**	**J**	5	--	--	31	82	--
Arsenic	**1.8**		11.3	13	--	13	61	--
Barium	**45**		1,500	--	--	5,500	14,000	--
Beryllium	**0.39**		22	--	--	160	410	--
Boron	**3.6**		40	--	--	16,000	41,000	--
Cadmium	ND	U	5.2	--	--	78	200	--
Calcium	**52,000**		--	--	--	--	--	--
Chromium	**12**		21	--	--	230	690	--
Cobalt	**4.8**		20	--	--	4,700	12,000	--
Copper	**12**		2,900	--	--	2,900	8,200	--
Iron	**9,700**		15,000	15,900	--	--	--	--
Lead	**23**		107	--	--	400	700	--
Magnesium	**21,000**		325,000	--	--	--	730,000	--
Manganese	**270**		630	636	--	1,600	4,100	--
Mercury	**0.018**	**J**	0.89	--	--	10	0.1	--
Nickel	**11**		100	--	--	1,600	4,100	--
Potassium	**730**		--	--	--	--	--	--
Silver	**0.12**	**J**	4.4	--	--	390	1,000	--
Sodium	**780**		--	--	--	--	--	--
Vanadium	**23**		550	--	--	550	1,400	--
Zinc	**41**		5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.34**	**J**	--	--	--	--	--	2
Boron	**0.051**	**J**	--	--	--	--	--	2
Cadmium	**0.0021**	**J**	--	--	--	--	--	0.005
Lead	ND	U	--	--	--	--	--	0.0075
Manganese	**0.24**	**L**	--	--	--	--	--	0.15
Nickel	ND	U	--	--	--	--	--	0.1
Zinc	ND	U	--	--	--	--	--	5
SPLP Metals (mg/L)								
Cadmium	NA		--	--	--	--	--	0.005
Lead	NA		--	--	--	--	--	0.0075
Manganese	**0.81**	**L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144627-2
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:56:57 AM

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

Table of Contents

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Job ID: 500-144627-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144627-2

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batches 430506 and 430647 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

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

Metals
Method(s) 6010B: The method blank for preparation batch 500-430382 and analytical batch 500-430649 contained Zinc above the reporting limit (RL). Associated samples 2790V-04-B01 (0-6) (500-144627-6), 2790V-04-B02 (0-6) (500-144627-7), 2790V-04-B03 (0-3) (500-144627-8) and 2790V-04-B04 (0-3) (500-144627-9) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010B: The continuing calibration blank (CCB) for 500-430649 contained Lead above the reporting limit (RL). Associated samples 2790V-04-B03 (0-3) (500-144627-8) and 2790V-04-B04 (0-3) (500-144627-9) were not re-analyzed because results were greater than 10X the value found in the CCB.

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Client Sample ID: 2790V-04-B01 (0-6) — Lab Sample ID: 500-144627-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0082	J	0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.010	J	0.035	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.23		0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.049		0.035	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.49		0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.47		0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.23		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.28		0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.48		0.035	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.17		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.33		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.33		0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.44		0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.8		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	3.6	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	12		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.8		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	9700		11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	730		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	780		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	41	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.062	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.81		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144627-6	2790V-04-B01 (0-6)	Solid	05/01/18 13:55	05/01/18 16:50

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/01/18 17:47*	*05/03/18 22:48*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/01/18 17:47*	*05/03/18 22:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 134*	*05/01/18 17:47*	*05/03/18 22:48*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/01/18 17:47*	*05/03/18 22:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Acenaphthylene	**0.0082**	**J**	0.035	0.0047	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Acenaphthene	**0.010**	**J**	0.035	0.0064	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Fluorene	**0.013**	**J**	0.035	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachlorobenzene	<0.072		0.072	0.0082	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Phenanthrene	**0.23**		0.035	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Anthracene	**0.049**		0.035	0.0059	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Fluoranthene	**0.49**		0.035	0.0066	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Pyrene	**0.47**		0.035	0.0071	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[a]anthracene	**0.23**		0.035	0.0048	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.28**		0.035	0.0097	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[b]fluoranthene	**0.48**		0.035	0.0077	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[k]fluoranthene	**0.17**		0.035	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[a]pyrene	**0.33**		0.035	0.0069	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Indeno[1,2,3-cd]pyrene	**0.33**		0.035	0.0092	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[g,h,i]perylene	**0.44**		0.035	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*103*		*46 - 133*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
Phenol-d5	*90*		*46 - 125*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
Nitrobenzene-d5	*94*		*41 - 120*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
2-Fluorobiphenyl	*104*		*44 - 121*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
2,4,6-Tribromophenol	*75*		*25 - 139*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
Terphenyl-d14	*107*		*35 - 160*	*05/03/18 07:14*	*05/03/18 22:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.1	0.21	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Arsenic	**1.8**		0.53	0.18	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Barium	**45**		0.53	0.061	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Beryllium	**0.39**		0.21	0.050	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Boron	**3.6**	**B**	2.7	0.25	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Cadmium	**0.18**	**B**	0.11	0.019	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Calcium	**52000**	**B**	110	18	mg/Kg	☼	05/02/18 16:07	05/05/18 00:06	10
Chromium	**12**		0.53	0.26	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Cobalt	**4.8**		0.27	0.070	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Copper	**12**		0.53	0.15	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Iron	**9700**		11	5.5	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Lead	**23**		0.27	0.12	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Magnesium	**21000**		5.3	2.6	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Manganese	**270**		0.53	0.077	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Nickel	**11**		0.53	0.15	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Potassium	**730**		27	9.4	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Silver	**0.12**	**J**	0.27	0.069	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Sodium	**780**		53	7.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Vanadium	**23**		0.27	0.063	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Zinc	**41**	**B**	1.1	0.47	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 13:10	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:10	1

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0021**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 13:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 13:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 13:10	1
Manganese	**0.24**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 13:10	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Zinc	**0.062**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.81**		0.025	0.010	mg/L		05/08/18 16:22	05/10/18 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0063	mg/Kg	☼	05/08/18 17:30	05/09/18 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.5**		0.20	0.20	SU			05/02/18 16:06	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144627
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

Client	Client Project #
EEE	1009341.0041.02
Project Name	
FAP 525 (US 20)	
Project Location/State	**Lab Project #**
McHenry Co. IL	
Sampler	**Lab PM**
E Fisher	R Wright

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TAL RCRA Total Metals	% Solids	pH					
6		2790V-04-B01(0-6)	5/1/18	1355	2	S		X	X	X	X						
7		2790V-04-B02(0-6)	"	1405	2	S		X	X	X	X						
8		2790V-04-B03(0-3)	"	1420	2	S		X	X	X	X						
9		2790V-04-B04(0-3)	"	1440	2	S		X	X	X	X						

Preservative Key
1. HCL, Cool to 4°
2. H_2SO_4, Cool to 4°
3. HNO_3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. $NaHSO_4$
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EEE	5/1/18	1510		TA	5/1/18	1510
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	TA	5/2/18	1650		TA	05/01/18	1650
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier ✓
Shipped
Hand Delivered

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

Client Comments

Lab Comments:

TAL-4124 (0011208)

5/16/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144627-2

Login Number: 144627
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
19333 E. Grant Highway (ISGS #3696-5)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.2339 (Decimal Degrees) Longitude: -88.57548 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23390 Longitude: - 88.57548

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Location 2790V-05-B01 was sampled within the construction zone adjacent to ISGS #3696-5 (2790V-5, Franks, Gerkin, and McKenna). Refer to PSI Report for ISGS #3696-5 (2790V-5, Franks, Gerkin, and McKenna) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144629-2.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

11/27/2020

Date:

P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-5 (Franks, Gerkin, and McKenna)		Comparison Criteria					
BORING	2790V-05-B01		MACs			TACO		
SAMPLE	2790V-05-B01 (0-6)							
MATRIX	Soil							
DEPTH (feet)	0-6							
pH	8.6		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
PID	--							
VOCs (None Detected)								
SVOCs (mg/kg)								
Anthracene	**0.0086**	J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.05**		0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.054**		0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.092**		0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.024**	J	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.031**	J	9	--	--	9	1,700	--
Chrysene	**0.057**		88	--	--	88	17,000	--
Dibenz(a,h)anthracene	**0.0073**	J	0.09	0.42	0.2	0.42	17	--
Fluoranthene	**0.11**		3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.023**	J	0.9	1.6	0.9	1.6	170	--
Phenanthrene	**0.053**		--	--	--	--	--	--
Pyrene	**0.079**		2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	**0.48**	J	5	--	--	31	82	--
Arsenic	**1.3**		11.3	13	--	13	61	--
Barium	**15**		1,500	--	--	5,500	14,000	--
Beryllium	**0.25**		22	--	--	160	410	--
Boron	**4.3**		40	--	--	16,000	41,000	--
Calcium	**110,000**		--	--	--	--	--	--
Chromium	**9.3**		21	--	--	230	690	--
Cobalt	**3**		20	--	--	4,700	12,000	--
Copper	**7**		2,900	--	--	2,900	8,200	--
Iron	**7,700**		15,000	15,900	--	--	--	--
Lead	**35**		107	--	--	400	700	--
Magnesium	**46,000**		325,000	--	--	--	730,000	--
Manganese	**170**		630	636	--	1,600	4,100	--
Mercury	**0.0077**	J	0.89	--	--	10	0.1	--
Nickel	**7.6**		100	--	--	1,600	4,100	--
Potassium	**600**		--	--	--	--	--	--
Sodium	**360**		--	--	--	--	--	--
Vanadium	**19**		550	--	--	550	1,400	--
Zinc	**26**		5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.21**	J	--	--	--	--	--	2
Boron	**0.055**	J	--	--	--	--	--	2
Cadmium	**0.002**	J	--	--	--	--	--	0.005
Iron	**0.27**	J	--	--	--	--	--	5
Manganese	**0.79**	L	--	--	--	--	--	0.15
Zinc	**0.062**	J	--	--	--	--	--	5
SPLP Metals (mg/L)								
Manganese	**0.32**	L	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144629-2
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:58:18 AM

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

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-2

Job ID: 500-144629-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144629-2

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 431344 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The method blank for preparation batch 500-430629 and analytical batch 500-430740 contained Di-n-butyl phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Metals
Method(s) 6010B: The continuing calibration blanks (CCB) contained Selenium above the reporting limit (RL). The sample results 2790V-05-B01 (0-6) (500-144629-6) associated with this CCB was below the RL; therefore, re-analysis of samples was not performed.

Method(s) 245.1, 7470A: The continuing calibration verification (CCV) associated with batch 500-431435 recovered above the upper control limit for Mercury The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: 2790V-05-B01 (0-6) (500-144629-6).

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-2

Client Sample ID: 2790V-05-B01 (0-6)

Lab Sample ID: 500-144629-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.053		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0086	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.11		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.079		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.050		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.057		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.092		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.031	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.054		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.023	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0073	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.024	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.48	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.3		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	15		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.25		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	4.3	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.12	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	110000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.3		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.0		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	7.0		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	7700		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	35	B	0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	46000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	170		0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.6		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	600		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	360		52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	26		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.21	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.27	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.79		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.062	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.32		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.0077	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144629-6	2790V-05-B01 (0-6)	Solid	05/01/18 10:15	05/01/18 16:50

Client Sample ID: 2790V-05-B01 (0-6)
Date Collected: 05/01/18 10:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-6
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 131*	*05/01/18 17:47*	*05/09/18 20:07*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*05/01/18 17:47*	*05/09/18 20:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*05/01/18 17:47*	*05/09/18 20:07*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/01/18 17:47*	*05/09/18 20:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1

Client Sample ID: 2790V-05-B01 (0-6)
Date Collected: 05/01/18 10:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-6
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Phenanthrene	**0.053**		0.036	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Anthracene	**0.0086**	**J**	0.036	0.0061	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Fluoranthene	**0.11**		0.036	0.0068	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Pyrene	**0.079**		0.036	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Benzo[a]anthracene	**0.050**		0.036	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1

Client Sample ID: 2790V-05-B01 (0-6)
Date Collected: 05/01/18 10:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-6
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.057		0.036	0.0099	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Benzo[b]fluoranthene	0.092		0.036	0.0079	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Benzo[k]fluoranthene	0.031	J	0.036	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Benzo[a]pyrene	0.054		0.036	0.0071	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Indeno[1,2,3-cd]pyrene	0.023	J	0.036	0.0095	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Dibenz(a,h)anthracene	0.0073	J	0.036	0.0071	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
Benzo[g,h,i]perylene	0.024	J	0.036	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*112*		*46 - 133*	*05/04/18 06:47*	*05/05/18 04:53*	*1*
Phenol-d5	*117*		*46 - 125*	*05/04/18 06:47*	*05/05/18 04:53*	*1*
Nitrobenzene-d5	*103*		*41 - 120*	*05/04/18 06:47*	*05/05/18 04:53*	*1*
2-Fluorobiphenyl	*89*		*44 - 121*	*05/04/18 06:47*	*05/05/18 04:53*	*1*
2,4,6-Tribromophenol	*79*		*25 - 139*	*05/04/18 06:47*	*05/05/18 04:53*	*1*
Terphenyl-d14	*91*		*35 - 160*	*05/04/18 06:47*	*05/05/18 04:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.0	0.20	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Arsenic	1.3		0.52	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Barium	15		0.52	0.059	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Beryllium	0.25		0.21	0.048	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Boron	4.3	B	2.6	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Cadmium	0.12	B	0.10	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Calcium	110000	B	100	18	mg/Kg	☼	05/03/18 08:10	05/05/18 00:59	10
Chromium	9.3		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Cobalt	3.0		0.26	0.068	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Copper	7.0		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Iron	7700		10	5.4	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Lead	35	B	0.26	0.12	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Magnesium	46000		5.2	2.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Manganese	170		0.52	0.075	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Nickel	7.6		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Potassium	600		26	9.2	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Sodium	360		52	7.7	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Vanadium	19		0.26	0.061	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1
Zinc	26		1.0	0.46	mg/Kg	☼	05/03/18 08:10	05/04/18 03:14	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.21	J	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:02	1
Boron	0.055	J	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:02	1

Client Sample ID: 2790V-05-B01 (0-6)
Date Collected: 05/01/18 10:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-6
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0020**	**J**	0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:02	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:02	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:02	1
Iron	**0.27**	**J**	0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:02	1
Manganese	**0.79**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:02	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:02	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:02	1
Zinc	**0.062**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.32**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0077**	**J**	0.017	0.0058	mg/Kg	☼	05/08/18 17:30	05/09/18 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.6**		0.20	0.20	SU			05/08/18 16:49	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-2

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

(optional)

Report To
Contact: D Tibbott
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)

Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144629

Chain of Custody Number:

Page 2 of 4

Temperature °C of Cooler: 3.3

Client: EE
Client Project #: 1009341.0041.02
Project Name: FAP 525 (MS20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TCLP/SPLP total metals	% solids pH						Comments
6		2790V-05-B01(0-6)	5/1/18	1015	2	S		X	X	X	X						

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EE	5/1/18	1510		TA	5/1/18	1510
	TA	5/1/18	1650		TA MT	05/01/18	1650

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

TAL-4124-500-(1209)

5/16/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144629-2

Login Number: 144629
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
19323 E Grant Highway (ISGS #3696-6)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.23319 (Decimal Degrees) Longitude: -88.57465 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23319 Longitude: - 88.57465

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-06-B01 and 2790V-06-B02 were sampled within the construction zone adjacent to ISGS #3696-6 (2790V-6, Pondview Building). Refer to PSI Report for ISGS #3696-6 (2790V-6, Pondview Building) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144629-3.

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

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

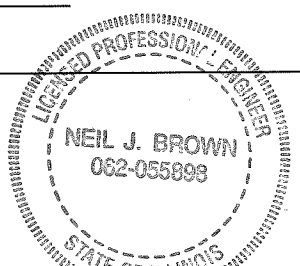
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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

Neil J. Brown
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

1/27/2020
Date:



P.E or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-6 (Pondview Building)		Comparison Criteria					
BORING	2790V-06-B01	2790V-06-B02	MACs			TACO		
SAMPLE	2790V-06-B01 (0-6)	2790V-06-B02 (0-6)						
MATRIX	Soil	Soil						
DEPTH (feet)	0-6	0-6						
pH	8.2	8.4						
PID	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)								
2-Butanone (MEK)	ND U	**0.0043**	--	--	--	--	--	--
Acetone	**0.0082 J**	**0.025**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)								
Benzo(a)anthracene	**0.011 J**	**0.013 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.013 J**	**0.015 J**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.024 J**	**0.03 J**	0.9	2.1	1.5	2.1	170	--
Chrysene	**0.013 J**	**0.018 J**	88	--	--	88	17,000	--
Fluoranthene	**0.021 J**	**0.042**	3,100	--	--	3,100	82,000	--
Phenanthrene	**0.0066 J**	**0.026 J**	--	--	--	--	--	--
Pyrene	**0.016 J**	**0.027 J**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	**0.36 J**	**0.44 J**	5	--	--	31	82	--
Arsenic	**2**	**1.9**	11.3	13	--	13	61	--
Barium	**37**	**47**	1,500	--	--	5,500	14,000	--
Beryllium	**0.38**	**0.32**	22	--	--	160	410	--
Boron	**5.5**	**3.6**	40	--	--	16,000	41,000	--
Calcium	**51,000**	**14,000**	--	--	--	--	--	--
Chromium	**11**	**11**	21	--	--	230	690	--
Cobalt	**5.2**	**3.6**	20	--	--	4,700	12,000	--
Copper	**9.9**	**6.1**	2,900	--	--	2,900	8,200	--
Iron	**9,400**	**8,300**	15,000	15,900	--	--	--	--
Lead	**13**	**14**	107	--	--	400	700	--
Magnesium	**24,000**	**8,400**	325,000	--	--	--	730,000	--
Manganese	**240**	**240**	630	636	--	1,600	4,100	--
Mercury	**0.016 J**	**0.031**	0.89	--	--	10	0.1	--
Nickel	**12**	**7.2**	100	--	--	1,600	4,100	--
Potassium	**1,000**	**710**	--	--	--	--	--	--
Silver	**0.1 J**	**0.099 J**	4.4	--	--	390	1,000	--
Sodium	**530**	**1,200**	--	--	--	--	--	--
Vanadium	**20**	**22**	550	--	--	550	1,400	--
Zinc	**31**	**32**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.34 J**	**0.4 J**	--	--	--	--	--	2
Boron	ND U	**0.065 J**	--	--	--	--	--	2
Manganese	**0.24 L**	**1.5 L**	--	--	--	--	--	0.15
Zinc	**0.088 J**	**0.044 J**	--	--	--	--	--	5
SPLP Metals (mg/L)								
Manganese	**0.53 L**	**1.4 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144629-3
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:58:34 AM

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

Table of Contents

Job ID: 500-144629-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144629-3

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 431344 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The method blank for preparation batch 500-430629 and analytical batch 500-430740 contained Di-n-butyl phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Metals
Method(s) 6010B: The continuing calibration blanks (CCB) contained Selenium above the reporting limit (RL). The sample results2790V-06-B02 (0-6) (500-144629-7) and 2790V-06-B01 (0-6) (500-144629-8) associated with this CCB was below the RL; therefore, re-analysis of samples was not performed.

Method(s) 245.1, 7470A: The continuing calibration verification (CCV) associated with batch 500-431435 recovered above the upper control limit for Mercury The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 2790V-06-B02 (0-6) (500-144629-7), 2790V-06-B01 (0-6) (500-144629-8), and (LB 500-431001/1-C).

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Client Sample ID: 2790V-06-B02 (0-6) — Lab Sample ID: 500-144629-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.025		0.016	0.0071	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0043		0.0041	0.0018	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.026	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.042		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.027	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.013	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.030	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.015	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.44	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.9		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.32		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.6	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.6		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	6.1		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	8300		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	14	B	0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8400		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.2		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	710		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.099	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	1200		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.40	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	1.5		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.044	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-06-B01 (0-6) — Lab Sample ID: 500-144629-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0082	J	0.014	0.0063	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.0066	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.021	J	0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.016	J	0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.024	J	0.035	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.0		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Client Sample ID: 2790V-06-B01 (0-6) (Continued)

Lab Sample ID: 500-144629-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	37		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.5	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	100	17	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	9.9		0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	9400		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	13	B	0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		26	9.1	mg/Kg	1	☼	6010B	Total/NA
Silver	0.10	J	0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	530		52	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.088	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.53		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.017	0.0055	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144629-7	2790V-06-B02 (0-6)	Solid	05/01/18 10:35	05/01/18 16:50
500-144629-8	2790V-06-B01 (0-6)	Solid	05/01/18 10:55	05/01/18 16:50

Client Sample ID: 2790V-06-B02 (0-6)
Date Collected: 05/01/18 10:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-7
Matrix: Solid
Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.025**		0.016	0.0071	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
2-Butanone (MEK)	**0.0043**		0.0041	0.0018	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/01/18 17:47*	*05/09/18 20:35*	*1*
Dibromofluoromethane	*110*		*75 - 126*	*05/01/18 17:47*	*05/09/18 20:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*	*05/01/18 17:47*	*05/09/18 20:35*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/01/18 17:47*	*05/09/18 20:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1

Client Sample ID: 2790V-06-B02 (0-6)
Date Collected: 05/01/18 10:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-7
Matrix: Solid
Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Phenanthrene	**0.026**	**J**	0.037	0.0052	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Fluoranthene	**0.042**		0.037	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Pyrene	**0.027**	**J**	0.037	0.0074	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Benzo[a]anthracene	**0.013**	**J**	0.037	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1

Client Sample ID: 2790V-06-B02 (0-6)
Date Collected: 05/01/18 10:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-7
Matrix: Solid
Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.018**	**J**	0.037	0.010	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Benzo[b]fluoranthene	**0.030**	**J**	0.037	0.0081	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Benzo[a]pyrene	**0.015**	**J**	0.037	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 05:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*108*		*46 - 133*	*05/04/18 06:47*	*05/05/18 05:20*	*1*
Phenol-d5	*113*		*46 - 125*	*05/04/18 06:47*	*05/05/18 05:20*	*1*
Nitrobenzene-d5	*96*		*41 - 120*	*05/04/18 06:47*	*05/05/18 05:20*	*1*
2-Fluorobiphenyl	*88*		*44 - 121*	*05/04/18 06:47*	*05/05/18 05:20*	*1*
2,4,6-Tribromophenol	*99*		*25 - 139*	*05/04/18 06:47*	*05/05/18 05:20*	*1*
Terphenyl-d14	*92*		*35 - 160*	*05/04/18 06:47*	*05/05/18 05:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.44**	**J**	1.1	0.21	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Arsenic	**1.9**		0.54	0.19	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Barium	**47**		0.54	0.062	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Beryllium	**0.32**		0.22	0.051	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Boron	**3.6**	**B**	2.7	0.25	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Cadmium	**0.14**	**B**	0.11	0.020	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Calcium	**14000**	**B**	11	1.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Chromium	**11**		0.54	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Cobalt	**3.6**		0.27	0.071	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Copper	**6.1**		0.54	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Iron	**8300**		11	5.7	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Lead	**14**	**B**	0.27	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Magnesium	**8400**		5.4	2.7	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Manganese	**240**		0.54	0.079	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Nickel	**7.2**		0.54	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Potassium	**710**		27	9.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Silver	**0.099**	**J**	0.27	0.070	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Sodium	**1200**		54	8.0	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Vanadium	**22**		0.27	0.064	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1
Zinc	**32**		1.1	0.48	mg/Kg	☼	05/03/18 08:10	05/04/18 03:18	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.40**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:06	1
Boron	**0.065**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:06	1

Client Sample ID: 2790V-06-B02 (0-6)
Date Collected: 05/01/18 10:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-7
Matrix: Solid
Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:06	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:06	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:06	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:06	1
Manganese	**1.5**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:06	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:06	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:06	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:06	1
Zinc	**0.044**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.4**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.017	0.0058	mg/Kg	☼	05/08/18 17:30	05/09/18 13:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.4**		0.20	0.20	SU			05/08/18 16:54	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0082	J	0.014	0.0063	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chloroethane	<0.0036	*	0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/01/18 17:47*	*05/09/18 21:03*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/01/18 17:47*	*05/09/18 21:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*05/01/18 17:47*	*05/09/18 21:03*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 21:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Phenanthrene	**0.0066**	**J**	0.035	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Fluoranthene	**0.021**	**J**	0.035	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Pyrene	**0.016**	**J**	0.035	0.0071	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[a]anthracene	**0.011**	**J**	0.035	0.0048	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.013**	**J**	0.035	0.0097	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[b]fluoranthene	**0.024**	**J**	0.035	0.0077	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[k]fluoranthene	<0.035		0.035	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[a]pyrene	**0.013**	**J**	0.035	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0093	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*113*		*46 - 133*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
Phenol-d5	*117*		*46 - 125*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
Nitrobenzene-d5	*100*		*41 - 120*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
2-Fluorobiphenyl	*91*		*44 - 121*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
2,4,6-Tribromophenol	*102*		*25 - 139*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
Terphenyl-d14	*93*		*35 - 160*	*05/04/18 06:47*	*05/05/18 05:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.36**	**J**	1.0	0.20	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Arsenic	**2.0**		0.52	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Barium	**37**		0.52	0.059	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Beryllium	**0.38**		0.21	0.048	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Boron	**5.5**	**B**	2.6	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Cadmium	**0.17**	**B**	0.10	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Calcium	**51000**	**B**	100	17	mg/Kg	☼	05/03/18 08:10	05/05/18 01:03	10
Chromium	**11**		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Cobalt	**5.2**		0.26	0.068	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Copper	**9.9**		0.52	0.14	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Iron	**9400**		10	5.4	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Lead	**13**	**B**	0.26	0.12	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Magnesium	**24000**		5.2	2.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Manganese	**240**		0.52	0.075	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Nickel	**12**		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Potassium	**1000**		26	9.1	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Silver	**0.10**	**J**	0.26	0.067	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Sodium	**530**		52	7.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Vanadium	**20**		0.26	0.061	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Zinc	**31**		1.0	0.45	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:10	1
Boron	<0.50		0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:10	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:10	1
Manganese	**0.24**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:10	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Zinc	**0.088**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.53**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0055	mg/Kg	☼	05/08/18 17:30	05/09/18 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.2**		0.20	0.20	SU			05/08/18 16:58	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

Bill To (optional)
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144629
Chain of Custody Number:
Page 3 of 4
Temperature °C of Cooler: 3.3

Client: BFE
Client Project #: 1009341.0041.02
Project Name: PAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Knight

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP total Metals	% solids pH						Comments
7		2790V-06-B02(0-6)	5/1/18	1035	2	S	X	X	X	X						
8		2790V-06-B01(0-6)	|	1055	2	S	X	X	X	X						

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days ____ Other
Requested Due Date ____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	BFE	5/1/18	1510	[signature]	TA	5/1/18	1510
[signature]	TA	5/1/18	1650	[signature]	TALU	05/01/18	1650

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments:

Lab Comments:

TAL-4124-500 (1208)

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144629-3

Login Number: 144629
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available: _____

Physical Site Location (address, including number and street):
19300 block of E. Grant Highway (ISGS #3696-7)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.23356 (Decimal Degrees) Longitude: -88.57489 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.): _____

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box: _____
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box: _____
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23356 Longitude: - 88.57489

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-04-B01 through 2790V-06-B01 were sampled within the construction zone adjacent to ISGS #3696-7 (Tributary to the South Branch of the Kishwaukee River). Refer to PSI Report for ISGS #3696-7 (Tributary to the South Branch of the Kishwaukee River) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data packages J144627-2 and J144629-3.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055893
STATE OF ILLINOIS

P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC	=	Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
MSA	=	Metropolitan Statistical Area
TACO	=	Tiered Approach to Corrective Action Objectives
TCLP	=	Toxicity Characteristic Leaching Procedure.
GCGIER	=	Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER	=	Soil Component of the Groundwater Ingestion Exposure Route
SPLP	=	Synthetic Precipitation Leaching Procedure.
ND	=	Not detected.
NA	=	Not analyzed or not applicable.
J	=	Estimated value.
U	=	Analyte was analyzed for but not detected.
PID	=	Photoionization detector.
--	=	No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

#	=	pH is less than 6.25 or greater than 9.0 standard units.
**	=	Headspace reading above background (outside of instrument margin of error).
†	=	Concentration exceeds the most stringent MAC.
m	=	Concentration exceeds the MAC for an MSA.
*	=	Concentration exceeds the MAC for Chicago corporate limits.
c	=	Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r	=	Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L	=	The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1	=	Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2	=	Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
	=	Headspace reading exceeds background levels
	=	Concentration exceeds the most stringent MAC, but is below the MSA MAC.
	=	Concentration exceeds the Chicago MAC, but is below the MSA MAC.
	=	Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-7 (Tributary to the South Brank of the Kishwaukee River)		Comparison Criteria					
BORING	2790V-04-B01	2790V-06-B01	MACs			TACO		
SAMPLE	2790V-04-B01 (0-6)	2790V-06-B01 (0-6)						
MATRIX	Soil	Soil						
DEPTH (feet)	0-6	0-6						
pH	8.5	8.2						
PID	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (None Detected)								
2-Butanone (MEK)	ND U	ND U	--	--	--	--	--	--
Acetone	ND U	**0.0082 J**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)								
2-Methylnaphthalene	ND U	ND U	--	--	--	--	--	--
Acenaphthene	**0.01 J**	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	**0.0082 J**	ND U	--	--	--	--	--	--
Anthracene	**0.049**	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.23**	**0.011 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.33** †	**0.013 J**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.48**	**0.024 J**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.44**	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.17**	ND U	9	--	--	9	1,700	--
Chrysene	**0.28**	**0.013 J**	88	--	--	88	17,000	--
Fluoranthene	**0.49**	**0.021 J**	3,100	--	--	3,100	82,000	--
Fluorene	**0.013 J**	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.33**	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	**0.23**	**0.0066 J**	--	--	--	--	--	--
Pyrene	**0.47**	**0.016 J**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	**0.26 J**	**0.36 J**	5	--	--	31	82	--
Arsenic	**1.8**	**2**	11.3	13	--	13	61	--
Barium	**45**	**37**	1,500	--	--	5,500	14,000	--
Beryllium	**0.39**	**0.38**	22	--	--	160	410	--
Boron	**3.6**	**5.5**	40	--	--	16,000	41,000	--
Calcium	**52,000**	**51,000**	--	--	--	--	--	--
Chromium	**12**	**11**	21	--	--	230	690	--
Cobalt	**4.8**	**5.2**	20	--	--	4,700	12,000	--
Copper	**12**	**9.9**	2,900	--	--	2,900	8,200	--
Iron	**9,700**	**9,400**	15,000	15,900	--	--	--	--
Lead	**23**	**13**	107	--	--	400	700	--
Magnesium	**21,000**	**24,000**	325,000	--	--	--	730,000	--
Manganese	**270**	**240**	630	636	--	1,600	4,100	--
Mercury	**0.018 J**	**0.016 J**	0.89	--	--	10	0.1	--
Nickel	**11**	**12**	100	--	--	1,600	4,100	--
Potassium	**730**	**1,000**	--	--	--	--	--	--
Silver	**0.12 J**	**0.1 J**	4.4	--	--	390	1,000	--
Sodium	**780**	**530**	--	--	--	--	--	--
Vanadium	**23**	**20**	550	--	--	550	1,400	--
Zinc	**41**	**31**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.34 J**	**0.34 J**	--	--	--	--	--	2
Boron	**0.051 J**	ND U	--	--	--	--	--	2
Cadmium	**0.0021 J**	N/A	--	--	--	--	--	0.005
Lead	ND U	N/A	--	--	--	--	--	0.0075
Manganese	**0.24 L**	**0.24 L**	--	--	--	--	--	0.15
Zinc	ND U	**0.088 J**	--	--	--	--	--	5
SPLP Metals (mg/L)								
Manganese	**0.81 L**	**0.53 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144627-2
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:56:57 AM

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

Table of Contents

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Job ID: 500-144627-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144627-2

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batches 430506 and 430647 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

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

Metals
Method(s) 6010B: The method blank for preparation batch 500-430382 and analytical batch 500-430649 contained Zinc above the reporting limit (RL). Associated samples 2790V-04-B01 (0-6) (500-144627-6), 2790V-04-B02 (0-6) (500-144627-7), 2790V-04-B03 (0-3) (500-144627-8) and 2790V-04-B04 (0-3) (500-144627-9) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010B: The continuing calibration blank (CCB) for 500-430649 contained Lead above the reporting limit (RL). Associated samples 2790V-04-B03 (0-3) (500-144627-8) and 2790V-04-B04 (0-3) (500-144627-9) were not re-analyzed because results were greater than 10X the value found in the CCB.

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Client Sample ID: 2790V-04-B01 (0-6) — Lab Sample ID: 500-144627-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0082	J	0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.010	J	0.035	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.013	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.23		0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.049		0.035	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.49		0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.47		0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.23		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.28		0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.48		0.035	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.17		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.33		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.33		0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.44		0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	1.8		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	3.6	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	12		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.8		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	9700		11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	730		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	780		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	41	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.062	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.81		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144627-6	2790V-04-B01 (0-6)	Solid	05/01/18 13:55	05/01/18 16:50

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/01/18 17:47*	*05/03/18 22:48*	*1*
Dibromofluoromethane	*102*		*75 - 126*	*05/01/18 17:47*	*05/03/18 22:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 134*	*05/01/18 17:47*	*05/03/18 22:48*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/01/18 17:47*	*05/03/18 22:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Methylnaphthalene	<0.072		0.072	0.0065	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Acenaphthylene	**0.0082**	**J**	0.035	0.0047	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Acenaphthene	**0.010**	**J**	0.035	0.0064	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Fluorene	**0.013**	**J**	0.035	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Hexachlorobenzene	<0.072		0.072	0.0082	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Phenanthrene	**0.23**		0.035	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Anthracene	**0.049**		0.035	0.0059	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Fluoranthene	**0.49**		0.035	0.0066	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Pyrene	**0.47**		0.035	0.0071	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[a]anthracene	**0.23**		0.035	0.0048	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.28**		0.035	0.0097	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[b]fluoranthene	**0.48**		0.035	0.0077	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[k]fluoranthene	**0.17**		0.035	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[a]pyrene	**0.33**		0.035	0.0069	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Indeno[1,2,3-cd]pyrene	**0.33**		0.035	0.0092	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
Benzo[g,h,i]perylene	**0.44**		0.035	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/03/18 07:14	05/03/18 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*103*		*46 - 133*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
Phenol-d5	*90*		*46 - 125*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
Nitrobenzene-d5	*94*		*41 - 120*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
2-Fluorobiphenyl	*104*		*44 - 121*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
2,4,6-Tribromophenol	*75*		*25 - 139*	*05/03/18 07:14*	*05/03/18 22:07*	*1*
Terphenyl-d14	*107*		*35 - 160*	*05/03/18 07:14*	*05/03/18 22:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.1	0.21	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Arsenic	**1.8**		0.53	0.18	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Barium	**45**		0.53	0.061	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Beryllium	**0.39**		0.21	0.050	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Boron	**3.6**	**B**	2.7	0.25	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Cadmium	**0.18**	**B**	0.11	0.019	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Calcium	**52000**	**B**	110	18	mg/Kg	☼	05/02/18 16:07	05/05/18 00:06	10
Chromium	**12**		0.53	0.26	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Cobalt	**4.8**		0.27	0.070	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Copper	**12**		0.53	0.15	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Iron	**9700**		11	5.5	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Lead	**23**		0.27	0.12	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Magnesium	**21000**		5.3	2.6	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Manganese	**270**		0.53	0.077	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Nickel	**11**		0.53	0.15	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Potassium	**730**		27	9.4	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Silver	**0.12**	**J**	0.27	0.069	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Sodium	**780**		53	7.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Vanadium	**23**		0.27	0.063	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1
Zinc	**41**	**B**	1.1	0.47	mg/Kg	☼	05/02/18 16:07	05/03/18 23:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 13:10	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:10	1

Client Sample ID: 2790V-04-B01 (0-6)
Date Collected: 05/01/18 13:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-6
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0021**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 13:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 13:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 13:10	1
Manganese	**0.24**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 13:10	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:10	1
Zinc	**0.062**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.81**		0.025	0.010	mg/L		05/08/18 16:22	05/10/18 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:49	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.019	0.0063	mg/Kg	☼	05/08/18 17:30	05/09/18 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.5**		0.20	0.20	SU			05/02/18 16:06	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-2

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144627
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

Client	Client Project #
EEE	1009341.0041.02
Project Name	
FAP 525 (US 20)	
Project Location/State	**Lab Project #**
McHenry Co. IL	
Sampler	**Lab PM**
E Fisher	R Wright

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TAL RCRA Total Metals	% Solids	pH					
6		2790V-04-B01(0-6)	5/1/18	1355	2	S		X	X	X	X						
7		2790V-04-B02(0-6)	"	1405	2	S		X	X	X	X						
8		2790V-04-B03(0-3)	"	1420	2	S		X	X	X	X						
9		2790V-04-B04(0-3)	"	1440	2	S		X	X	X	X						

Preservative Key
1. HCL, Cool to 4°
2. H_2SO_4, Cool to 4°
3. HNO_3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. $NaHSO_4$
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EEE	5/1/18	1510		TA	5/1/18	1510
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	TA	5/2/18	1650		TA	05/01/18	1650
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier ✓
Shipped
Hand Delivered

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

Client Comments

Lab Comments:

TAL-4124 (0011208)

5/16/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144627-2

Login Number: 144627
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144629-3
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:58:34 AM

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

Table of Contents

Job ID: 500-144629-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144629-3

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 431344 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The method blank for preparation batch 500-430629 and analytical batch 500-430740 contained Di-n-butyl phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Metals
Method(s) 6010B: The continuing calibration blanks (CCB) contained Selenium above the reporting limit (RL). The sample results2790V-06-B02 (0-6) (500-144629-7) and 2790V-06-B01 (0-6) (500-144629-8) associated with this CCB was below the RL; therefore, re-analysis of samples was not performed.

Method(s) 245.1, 7470A: The continuing calibration verification (CCV) associated with batch 500-431435 recovered above the upper control limit for Mercury The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 2790V-06-B02 (0-6) (500-144629-7), 2790V-06-B01 (0-6) (500-144629-8), and (LB 500-431001/1-C).

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

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

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

Client Sample ID: 2790V-06-B01 (0-6) — Lab Sample ID: 500-144629-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0082	J	0.014	0.0063	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.0066	J	0.035	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.021	J	0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.016	J	0.035	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.011	J	0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.024	J	0.035	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.013	J	0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.0		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Client Sample ID: 2790V-06-B01 (0-6) (Continued)

Lab Sample ID: 500-144629-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	37		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.38		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.5	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.17	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	100	17	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	9.9		0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	9400		10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	13	B	0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	240		0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		26	9.1	mg/Kg	1	☼	6010B	Total/NA
Silver	0.10	J	0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	530		52	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	31		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.088	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.53		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.016	J	0.017	0.0055	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144629-8	2790V-06-B01 (0-6)	Solid	05/01/18 10:55	05/01/18 16:50

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0082	J	0.014	0.0063	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chloroethane	<0.0036	*	0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Vinyl acetate	<0.0036		0.0036	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/01/18 17:47*	*05/09/18 21:03*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/01/18 17:47*	*05/09/18 21:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*05/01/18 17:47*	*05/09/18 21:03*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 21:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Phenanthrene	**0.0066**	**J**	0.035	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Fluoranthene	**0.021**	**J**	0.035	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Pyrene	**0.016**	**J**	0.035	0.0071	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[a]anthracene	**0.011**	**J**	0.035	0.0048	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.013**	**J**	0.035	0.0097	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[b]fluoranthene	**0.024**	**J**	0.035	0.0077	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[k]fluoranthene	<0.035		0.035	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[a]pyrene	**0.013**	**J**	0.035	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0093	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*113*		*46 - 133*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
Phenol-d5	*117*		*46 - 125*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
Nitrobenzene-d5	*100*		*41 - 120*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
2-Fluorobiphenyl	*91*		*44 - 121*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
2,4,6-Tribromophenol	*102*		*25 - 139*	*05/04/18 06:47*	*05/05/18 05:47*	*1*
Terphenyl-d14	*93*		*35 - 160*	*05/04/18 06:47*	*05/05/18 05:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.36**	**J**	1.0	0.20	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Arsenic	**2.0**		0.52	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Barium	**37**		0.52	0.059	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Beryllium	**0.38**		0.21	0.048	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Boron	**5.5**	**B**	2.6	0.24	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Cadmium	**0.17**	**B**	0.10	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Calcium	**51000**	**B**	100	17	mg/Kg	☼	05/03/18 08:10	05/05/18 01:03	10
Chromium	**11**		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Cobalt	**5.2**		0.26	0.068	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Copper	**9.9**		0.52	0.14	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Iron	**9400**		10	5.4	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Lead	**13**	**B**	0.26	0.12	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Magnesium	**24000**		5.2	2.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Manganese	**240**		0.52	0.075	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Nickel	**12**		0.52	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Potassium	**1000**		26	9.1	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Silver	**0.10**	**J**	0.26	0.067	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Sodium	**530**		52	7.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Vanadium	**20**		0.26	0.061	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1
Zinc	**31**		1.0	0.45	mg/Kg	☼	05/03/18 08:10	05/04/18 03:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:10	1
Boron	<0.50		0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:10	1

Client Sample ID: 2790V-06-B01 (0-6)
Date Collected: 05/01/18 10:55
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-8
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:10	1
Manganese	**0.24**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:10	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:10	1
Zinc	**0.088**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.53**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0055	mg/Kg	☼	05/08/18 17:30	05/09/18 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.2**		0.20	0.20	SU			05/08/18 16:58	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-3

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Chain of Custody Record

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

Bill To (optional)
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Lab Job #: 500-144629
Chain of Custody Number:
Page 3 of 4
Temperature °C of Cooler: 3.3

Client: BFE
Client Project #: 1009341.0041.02
Project Name: PAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP total Metals	% solids pH						Comments
7		2790V-06-B02 (0-6)	5/1/18	1035	2	S	X	X	X	X						
8		2790V-06-B01 (0-6)	|	1055	2	S	X	X	X	X						

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days ____ Other
Requested Due Date ______

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	BFE	5/1/18	1510	[signature]	TA	5/1/18	1510
[signature]	TA	5/1/18	1650	[signature]	TALU	05/01/18	1650

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments:

Lab Comments:

TAL-4124-500 (1208)

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144629-3

Login Number: 144629
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available: _____

Physical Site Location (address, including number and street):
6617 S. Grant Highway (ISGS #3696-8)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.2325 (Decimal Degrees) Longitude: -88.57393 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.): _____

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box: _____
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box: _____
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23250 Longitude: - 88.57393

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-07-B01 through 2790V-07-B04 were sampled within the construction zone adjacent to ISGS #3696-8 (2 Sisters Antique Barn) (#2790V-7, Farmstead). Refer to PSI Report for ISGS #3696-8 (2 Sisters Antique Barn) (#2790V-7, Farmstead) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144629-4.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

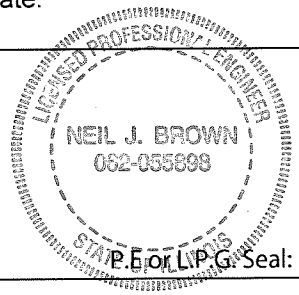
Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:



P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-8 (2 Sisters Antique Barn [Farmstead])				Comparison Criteria					
BORING	2790V-07-B01	2790V-07-B02	2790V-07-B03	2790V-07-B04	MACs			TACO		
SAMPLE	2790V-07-B01 (0-3)	2790V-07-B02 (0-3)	2790V-07-B03 (0-3)	2790V-07-B04 (0-3)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-3	0-3	0-3	0-3						
pH	7.8	8	8	8.8						
PID	--	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)										
Acetone	**0.013 J**	ND U	ND U	**0.036**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)										
Acenaphthene	ND U	ND U	ND U	**0.0073 J**	570	--	--	4,700	120,000	--
Anthracene	ND U	ND U	ND U	**0.017 J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.022 J**	ND U	**0.0096 J**	**0.072**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.025 J**	ND U	**0.0098 J**	**0.076**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.047**	**0.0089 J**	**0.016 J**	**0.13**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.013 J**	ND U	ND U	**0.031 J**	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.012 J**	ND U	ND U	**0.039**	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	**0.07 J**	ND U	ND U	ND U	46	--	--	46	4,100	--
Chrysene	**0.027 J**	ND U	**0.01 J**	**0.075**	88	--	--	88	17,000	--
Fluoranthene	**0.045**	**0.0089 J**	**0.015 J**	**0.19**	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	**0.0052 J**	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.012 J**	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	**0.014 J**	ND U	**0.0067 J**	**0.085**	--	--	--	--	--	--
Pyrene	**0.033 J**	ND U	**0.012 J**	**0.13**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	**0.45 J**	**0.35 J**	**0.36 J**	**0.43 J**	5	--	--	31	82	--
Arsenic	**2.8**	**2.8**	**2.9**	**4.1**	11.3	13	--	13	61	--
Barium	**61**	**70**	**61**	**31**	1,500	--	--	5,500	14,000	--
Beryllium	**0.46**	**0.57**	**0.5**	**0.37**	22	--	--	160	410	--
Boron	**4.2**	**4.9**	**3.7**	**5.7**	40	--	--	16,000	41,000	--
Cadmium	**0.42**	ND	ND	ND	5.2	--	--	78	200	--
Calcium	**14,000**	**7,200**	**8,900**	**82,000**	--	--	--	--	--	--
Chromium	**15**	**16**	**15**	**12**	21	--	--	230	690	--
Cobalt	**7.7**	**6.2**	**6.2**	**4.9**	20	--	--	4,700	12,000	--
Copper	**17**	**9.7**	**9.4**	**12**	2,900	--	--	2,900	8,200	--
Iron	**13,000**	**14,000**	**12,000**	**9,300**	15,000	15,900	--	--	--	--
Lead	**120 †**	**19**	**19**	**48**	107	--	--	400	700	--
Magnesium	**8,600**	**5,000**	**5,900**	**31,000**	325,000	--	--	--	730,000	--
Manganese	**400**	**320**	**280**	**210**	630	636	--	1,600	4,100	--
Mercury	**0.023**	**0.03**	**0.021**	**0.018**	0.89	--	--	10	0.1	--
Nickel	**13**	**14**	**12**	**12**	100	--	--	1,600	4,100	--
Potassium	**860**	**1,200**	**990**	**990**	--	--	--	--	--	--
Silver	**0.15 J**	**0.26 J**	**0.18 J**	**0.093 J**	4.4	--	--	390	1,000	--
Sodium	**1,300**	**550**	**1,500**	**730**	--	--	--	--	--	--
Vanadium	**24**	**29**	**26**	**17**	550	--	--	550	1,400	--
Zinc	**70**	**44**	**39**	**39**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	**0.34 J**	**0.42 J**	**0.38 J**	**0.36 J**	--	--	--	--	--	2
Boron	**0.051 J**	**0.063 J**	**0.051 J**	**0.05 J**	--	--	--	--	--	2
Cadmium	ND U	**0.002 J**	**0.0021 J**	**0.0022 J**	--	--	--	--	--	0.005
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	**0.44 L**	**0.24 L**	**0.45 L**	**0.27 L**	--	--	--	--	--	0.15
Selenium	ND U	**0.021 J**	ND U	**0.021 J**	--	--	--	--	--	0.05
Zinc	**0.056 J**	ND U	ND U	**0.041 J**	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	**1.1 L**	**1.3 L**	**1.4 L**	**0.94 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144629-4
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:58:56 AM

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

Table of Contents

Job ID: 500-144629-4

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144629-4

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 431344 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The method blank for preparation batch 500-430629 and analytical batch 500-430740 contained Di-n-butyl phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Metals
Method(s) 245.1, 7470A: The continuing calibration verification (CCV) associated with batch 500-431435 recovered above the upper control limit for Mercury The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 2790V-07-B04 (0-3) (500-144629-9), 2790V-07-B03 (0-3) (500-144629-10), 2790V-07-B02 (0-3) (500-144629-11), 2790V-07-B01 (0-3) (500-144629-12), (LB 500-431001/1-C), (500-144629-E-12-J DU) and (500-144629-E-12-K MS).

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-4

Client Sample ID: 2790V-07-B04 (0-3) — Lab Sample ID: 500-144629-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.036		0.019	0.0083	mg/Kg	1	☼	8260B	Total/NA
Acenaphthene	0.0073	J	0.036	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0052	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.085		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.017	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.19		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.13		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.072		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.075		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.13		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.039		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.076		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.031	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.43	J	0.94	0.18	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.1		0.47	0.16	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.47	0.054	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.37		0.19	0.044	mg/Kg	1	☼	6010B	Total/NA
Boron	5.7	B	2.3	0.22	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25	B	0.094	0.017	mg/Kg	1	☼	6010B	Total/NA
Calcium	82000	B	94	16	mg/Kg	10	☼	6010B	Total/NA
Chromium	12		0.47	0.23	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.9		0.23	0.062	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.47	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	9300		9.4	4.9	mg/Kg	1	☼	6010B	Total/NA
Lead	48	B	0.23	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000		4.7	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.47	0.068	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.47	0.14	mg/Kg	1	☼	6010B	Total/NA
Potassium	990		23	8.3	mg/Kg	1	☼	6010B	Total/NA
Silver	0.093	J	0.23	0.061	mg/Kg	1	☼	6010B	Total/NA
Sodium	730		47	7.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		0.94	0.41	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.050	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.041	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.94		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.018		0.018	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-07-B03 (0-3) — Lab Sample ID: 500-144629-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0067	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.015	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.012	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0096	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Client Sample ID: 2790V-07-B03 (0-3) (Continued) — Lab Sample ID: 500-144629-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.010	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.016	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0098	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.36	J	0.93	0.18	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.9		0.46	0.16	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.46	0.053	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.19	0.043	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7	B	2.3	0.22	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.093	0.017	mg/Kg	1	☼	6010B	Total/NA
Calcium	8900	B	9.3	1.6	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.46	0.23	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.23	0.061	mg/Kg	1	☼	6010B	Total/NA
Copper	9.4		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		9.3	4.8	mg/Kg	1	☼	6010B	Total/NA
Lead	19	B	0.23	0.11	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5900		4.6	2.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.46	0.067	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.46	0.13	mg/Kg	1	☼	6010B	Total/NA
Potassium	990		23	8.2	mg/Kg	1	☼	6010B	Total/NA
Silver	0.18	J	0.23	0.060	mg/Kg	1	☼	6010B	Total/NA
Sodium	1500		46	6.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Zinc	39		0.93	0.41	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.45		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.4		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-07-B02 (0-3) — Lab Sample ID: 500-144629-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.0089	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0089	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.35	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.8		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	70		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.57		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.9	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	7200	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.2		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	9.7		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	19	B	0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	5000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	320		0.54	0.079	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-07-B02 (0-3) (Continued) — Lab Sample ID: 500-144629-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	14		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.26	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	550		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	29		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	44		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.42	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.021	J	0.050	0.020	mg/L	1		6010B	TCLP
Manganese	1.3		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-07-B01 (0-3) — Lab Sample ID: 500-144629-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.022	0.0095	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.014	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.045		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.033	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.022	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.027	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.070	J	0.19	0.068	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.047		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.012	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.025	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.45	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.8		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	61		0.56	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	4.2	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.42	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.7		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	120	B	0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8600		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	860		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	1300		56	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	70		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-07-B01 (0-3) (Continued)

Lab Sample ID: 500-144629-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.44		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.056	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.018	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144629-9	2790V-07-B04 (0-3)	Solid	05/01/18 11:10	05/01/18 16:50
500-144629-10	2790V-07-B03 (0-3)	Solid	05/01/18 11:25	05/01/18 16:50
500-144629-11	2790V-07-B02 (0-3)	Solid	05/01/18 11:35	05/01/18 16:50
500-144629-12	2790V-07-B01 (0-3)	Solid	05/01/18 11:50	05/01/18 16:50

Client Sample ID: 2790V-07-B04 (0-3)
Date Collected: 05/01/18 11:10
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-9
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.036**		0.019	0.0083	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Carbon disulfide	<0.0048		0.0048	0.00099	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Chloroethane	<0.0048	*	0.0048	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Chloromethane	<0.0048		0.0048	0.0019	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Vinyl acetate	<0.0048		0.0048	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	05/01/18 17:47	05/09/18 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/01/18 17:47*	*05/09/18 21:31*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/01/18 17:47*	*05/09/18 21:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/01/18 17:47*	*05/09/18 21:31*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 21:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1

Client Sample ID: 2790V-07-B04 (0-3)
Date Collected: 05/01/18 11:10
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-9
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Acenaphthene	**0.0073**	**J**	0.036	0.0065	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Fluorene	**0.0052**	**J**	0.036	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Phenanthrene	**0.085**		0.036	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Anthracene	**0.017**	**J**	0.036	0.0061	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Fluoranthene	**0.19**		0.036	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Pyrene	**0.13**		0.036	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Benzo[a]anthracene	**0.072**		0.036	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1

Client Sample ID: 2790V-07-B04 (0-3)
Date Collected: 05/01/18 11:10
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-9
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.075**		0.036	0.0099	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Benzo[b]fluoranthene	**0.13**		0.036	0.0078	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Benzo[k]fluoranthene	**0.039**		0.036	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Benzo[a]pyrene	**0.076**		0.036	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
Benzo[g,h,i]perylene	**0.031**	**J**	0.036	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*113*		*46 - 133*	*05/04/18 06:47*	*05/05/18 06:15*	*1*
Phenol-d5	*117*		*46 - 125*	*05/04/18 06:47*	*05/05/18 06:15*	*1*
Nitrobenzene-d5	*105*		*41 - 120*	*05/04/18 06:47*	*05/05/18 06:15*	*1*
2-Fluorobiphenyl	*96*		*44 - 121*	*05/04/18 06:47*	*05/05/18 06:15*	*1*
2,4,6-Tribromophenol	*96*		*25 - 139*	*05/04/18 06:47*	*05/05/18 06:15*	*1*
Terphenyl-d14	*94*		*35 - 160*	*05/04/18 06:47*	*05/05/18 06:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.43**	**J**	0.94	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Arsenic	**4.1**		0.47	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Barium	**31**		0.47	0.054	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Beryllium	**0.37**		0.19	0.044	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Boron	**5.7**	**B**	2.3	0.22	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Cadmium	**0.25**	**B**	0.094	0.017	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Calcium	**82000**	**B**	94	16	mg/Kg	☼	05/03/18 08:10	05/05/18 01:07	10
Chromium	**12**		0.47	0.23	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Cobalt	**4.9**		0.23	0.062	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Copper	**12**		0.47	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Iron	**9300**		9.4	4.9	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Lead	**48**	**B**	0.23	0.11	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Magnesium	**31000**		4.7	2.3	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Manganese	**210**		0.47	0.068	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Nickel	**12**		0.47	0.14	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Potassium	**990**		23	8.3	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Selenium	<0.47		0.47	0.28	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Silver	**0.093**	**J**	0.23	0.061	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Sodium	**730**		47	7.0	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Thallium	<0.47		0.47	0.23	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Vanadium	**17**		0.23	0.055	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1
Zinc	**39**		0.94	0.41	mg/Kg	☼	05/03/18 08:10	05/04/18 03:34	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.36**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:14	1
Boron	**0.050**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:14	1

Client Sample ID: 2790V-07-B04 (0-3)
Date Collected: 05/01/18 11:10
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-9
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0022**	**J**	0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:14	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:14	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:14	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:14	1
Manganese	**0.27**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:14	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:14	1
Selenium	**0.021**	**J**	0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:14	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:14	1
Zinc	**0.041**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.94**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.018	0.0058	mg/Kg	☼	05/08/18 17:30	05/09/18 13:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/08/18 17:07	1

Client Sample ID: 2790V-07-B03 (0-3)
Date Collected: 05/01/18 11:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-10
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	05/01/18 17:47	05/09/18 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 131*	*05/01/18 17:47*	*05/09/18 21:58*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/01/18 17:47*	*05/09/18 21:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/01/18 17:47*	*05/09/18 21:58*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/01/18 17:47*	*05/09/18 21:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1

Client Sample ID: 2790V-07-B03 (0-3)
Date Collected: 05/01/18 11:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-10
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Phenanthrene	**0.0067**	**J**	0.038	0.0053	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Fluoranthene	**0.015**	**J**	0.038	0.0071	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Pyrene	**0.012**	**J**	0.038	0.0076	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Benzo[a]anthracene	**0.0096**	**J**	0.038	0.0051	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1

Client Sample ID: 2790V-07-B03 (0-3)
Date Collected: 05/01/18 11:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-10
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.010**	**J**	0.038	0.010	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Benzo[b]fluoranthene	**0.016**	**J**	0.038	0.0082	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Benzo[a]pyrene	**0.0098**	**J**	0.038	0.0074	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/04/18 06:47	05/05/18 06:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*108*		*46 - 133*	*05/04/18 06:47*	*05/05/18 06:42*	*1*
Phenol-d5	*112*		*46 - 125*	*05/04/18 06:47*	*05/05/18 06:42*	*1*
Nitrobenzene-d5	*101*		*41 - 120*	*05/04/18 06:47*	*05/05/18 06:42*	*1*
2-Fluorobiphenyl	*93*		*44 - 121*	*05/04/18 06:47*	*05/05/18 06:42*	*1*
2,4,6-Tribromophenol	*102*		*25 - 139*	*05/04/18 06:47*	*05/05/18 06:42*	*1*
Terphenyl-d14	*94*		*35 - 160*	*05/04/18 06:47*	*05/05/18 06:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.36**	**J**	0.93	0.18	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Arsenic	**2.9**		0.46	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Barium	**61**		0.46	0.053	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Beryllium	**0.50**		0.19	0.043	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Boron	**3.7**	**B**	2.3	0.22	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Cadmium	**0.18**	**B**	0.093	0.017	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Calcium	**8900**	**B**	9.3	1.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Chromium	**15**		0.46	0.23	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Cobalt	**6.2**		0.23	0.061	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Copper	**9.4**		0.46	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Iron	**12000**		9.3	4.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Lead	**19**	**B**	0.23	0.11	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Magnesium	**5900**		4.6	2.3	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Manganese	**280**		0.46	0.067	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Nickel	**12**		0.46	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Potassium	**990**		23	8.2	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Selenium	<0.46		0.46	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Silver	**0.18**	**J**	0.23	0.060	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Sodium	**1500**		46	6.9	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Thallium	<0.46		0.46	0.23	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Vanadium	**26**		0.23	0.055	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1
Zinc	**39**		0.93	0.41	mg/Kg	☼	05/03/18 08:10	05/04/18 03:38	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.38**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:18	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:18	1

Client Sample ID: 2790V-07-B03 (0-3)
Date Collected: 05/01/18 11:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-10
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0021**	**J**	0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:18	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:18	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:18	1
Manganese	**0.45**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:18	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:18	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:18	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:18	1
Zinc	<0.50		0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.4**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:36	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.017	0.0056	mg/Kg	☼	05/08/18 17:30	05/09/18 13:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.0**		0.20	0.20	SU			05/08/18 17:12	1

Client Sample ID: 2790V-07-B02 (0-3)
Date Collected: 05/01/18 11:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-11
Matrix: Solid
Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	05/01/18 17:47	05/09/18 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 131*	*05/01/18 17:47*	*05/09/18 22:25*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/01/18 17:47*	*05/09/18 22:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*05/01/18 17:47*	*05/09/18 22:25*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/01/18 17:47*	*05/09/18 22:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1

Client Sample ID: 2790V-07-B02 (0-3)
Date Collected: 05/01/18 11:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-11
Matrix: Solid
Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Fluoranthene	**0.0089**	**J**	0.039	0.0073	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1

Client Sample ID: 2790V-07-B02 (0-3)
Date Collected: 05/01/18 11:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-11
Matrix: Solid
Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Benzo[b]fluoranthene	**0.0089**	**J**	0.039	0.0085	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/04/18 06:47	05/05/18 07:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*110*		*46 - 133*	*05/04/18 06:47*	*05/05/18 07:09*	*1*
Phenol-d5	*115*		*46 - 125*	*05/04/18 06:47*	*05/05/18 07:09*	*1*
Nitrobenzene-d5	*101*		*41 - 120*	*05/04/18 06:47*	*05/05/18 07:09*	*1*
2-Fluorobiphenyl	*91*		*44 - 121*	*05/04/18 06:47*	*05/05/18 07:09*	*1*
2,4,6-Tribromophenol	*99*		*25 - 139*	*05/04/18 06:47*	*05/05/18 07:09*	*1*
Terphenyl-d14	*94*		*35 - 160*	*05/04/18 06:47*	*05/05/18 07:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.35**	**J**	1.1	0.21	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Arsenic	**2.8**		0.54	0.19	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Barium	**70**		0.54	0.062	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Beryllium	**0.57**		0.22	0.051	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Boron	**4.9**	**B**	2.7	0.25	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Cadmium	**0.19**	**B**	0.11	0.019	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Calcium	**7200**	**B**	11	1.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Chromium	**16**		0.54	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Cobalt	**6.2**		0.27	0.071	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Copper	**9.7**		0.54	0.15	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Iron	**14000**		11	5.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Lead	**19**	**B**	0.27	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Magnesium	**5000**		5.4	2.7	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Manganese	**320**		0.54	0.079	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Nickel	**14**		0.54	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Potassium	**1200**		27	9.6	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Silver	**0.26**	**J**	0.27	0.070	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Sodium	**550**		54	8.0	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Vanadium	**29**		0.27	0.064	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1
Zinc	**44**		1.1	0.48	mg/Kg	☼	05/03/18 08:10	05/04/18 03:42	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.42**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:22	1
Boron	**0.063**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:22	1

Client Sample ID: 2790V-07-B02 (0-3)
Date Collected: 05/01/18 11:35
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-11
Matrix: Solid
Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0020**	**J**	0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:22	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:22	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:22	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:22	1
Manganese	**0.24**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:22	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:22	1
Selenium	**0.021**	**J**	0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:22	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:22	1
Zinc	<0.50		0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.3**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:36	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.030**		0.018	0.0061	mg/Kg	☼	05/08/18 17:30	05/09/18 13:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.0**		0.20	0.20	SU			05/08/18 17:17	1

Client Sample ID: 2790V-07-B01 (0-3)
Date Collected: 05/01/18 11:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-12
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.013**	**J**	0.022	0.0095	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Bromomethane	<0.0054		0.0054	0.0021	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Chloroethane	<0.0054	*	0.0054	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00065	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Vinyl acetate	<0.0054		0.0054	0.0019	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	05/01/18 17:47	05/09/18 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/01/18 17:47*	*05/09/18 22:53*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*05/01/18 17:47*	*05/09/18 22:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*05/01/18 17:47*	*05/09/18 22:53*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/01/18 17:47*	*05/09/18 22:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1

Client Sample ID: 2790V-07-B01 (0-3)
Date Collected: 05/01/18 11:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-12
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Phenanthrene	**0.014**	**J**	0.037	0.0052	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Fluoranthene	**0.045**		0.037	0.0069	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Pyrene	**0.033**	**J**	0.037	0.0074	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Benzo[a]anthracene	**0.022**	**J**	0.037	0.0050	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1

Client Sample ID: 2790V-07-B01 (0-3)
Date Collected: 05/01/18 11:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-12
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.027**	**J**	0.037	0.010	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Bis(2-ethylhexyl) phthalate	**0.070**	**J**	0.19	0.068	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Benzo[b]fluoranthene	**0.047**		0.037	0.0081	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Benzo[k]fluoranthene	**0.012**	**J**	0.037	0.011	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Benzo[a]pyrene	**0.025**	**J**	0.037	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Indeno[1,2,3-cd]pyrene	**0.012**	**J**	0.037	0.0097	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.037	0.012	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/04/18 06:47	05/05/18 07:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*110*		*46 - 133*	*05/04/18 06:47*	*05/05/18 07:36*	*1*
Phenol-d5	*114*		*46 - 125*	*05/04/18 06:47*	*05/05/18 07:36*	*1*
Nitrobenzene-d5	*98*		*41 - 120*	*05/04/18 06:47*	*05/05/18 07:36*	*1*
2-Fluorobiphenyl	*91*		*44 - 121*	*05/04/18 06:47*	*05/05/18 07:36*	*1*
2,4,6-Tribromophenol	*100*		*25 - 139*	*05/04/18 06:47*	*05/05/18 07:36*	*1*
Terphenyl-d14	*94*		*35 - 160*	*05/04/18 06:47*	*05/05/18 07:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.45**	**J**	1.1	0.22	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Arsenic	**2.8**		0.56	0.19	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Barium	**61**		0.56	0.063	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Beryllium	**0.46**		0.22	0.052	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Boron	**4.2**	**B**	2.8	0.26	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Cadmium	**0.42**	**B**	0.11	0.020	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Calcium	**14000**	**B**	11	1.9	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Chromium	**15**		0.56	0.28	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Cobalt	**7.7**		0.28	0.073	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Copper	**17**		0.56	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Iron	**13000**		11	5.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Lead	**120**	**B**	0.28	0.13	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Magnesium	**8600**		5.6	2.8	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Manganese	**400**		0.56	0.081	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Nickel	**13**		0.56	0.16	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Potassium	**860**		28	9.9	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Silver	**0.15**	**J**	0.28	0.072	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Sodium	**1300**		56	8.2	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Vanadium	**24**		0.28	0.066	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1
Zinc	**70**		1.1	0.49	mg/Kg	☼	05/03/18 08:10	05/04/18 03:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 08:45	05/09/18 01:26	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/08/18 08:45	05/09/18 01:26	1

Client Sample ID: 2790V-07-B01 (0-3)
Date Collected: 05/01/18 11:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144629-12
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 08:45	05/09/18 01:26	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:26	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:26	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 08:45	05/09/18 01:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 08:45	05/09/18 01:26	1
Manganese	**0.44**		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:26	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:26	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 08:45	05/09/18 01:26	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 08:45	05/09/18 01:26	1
Zinc	**0.056**	**J**	0.50	0.020	mg/L		05/08/18 08:45	05/09/18 01:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.1**		0.025	0.010	mg/L		05/08/18 16:25	05/10/18 06:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 08:45	05/09/18 11:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 08:45	05/09/18 11:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^	0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.018	0.0058	mg/Kg	☼	05/08/18 17:30	05/09/18 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.8**		0.20	0.20	SU			05/08/18 17:21	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144629-4

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144629

Chain of Custody Number:

Page 4 of 4

Temperature °C of Cooler: 3.3

Client	Client Project #	Preservative
EAE	1009341.0041.02	
Project Name: FAP 525 (US 20)		Parameter
Project Location/State: McHenry Co, IL	Lab Project #	
Sampler: EFisher	Lab PM: R Wright	

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TAL PRSPAP Total Metals	% solids	pH	Comments
9		2790V-07-B04(0-3)	5/1/18	1110	2	S	X	X	X	X		
10		2790V-07-B03(0-3)		1125	2	S	X	X	X	X		
11		2790V-07-B02(0-3)		1135	2	S	X	X	X	X		
12		2790V-07-B01(0-3)		1150	2	S	X	X	X	X		

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date:

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	EAE	5/1/18	1510	[signature]	TA	5/1/18	1510
[signature]	TA	5/1/18	1650	[signature]	TALS	05/01/18	1650

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144629-4

Login Number: 144629
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
19207-19217 W. Union Road (ISGS #3696-9)

City: Marengo State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.23227 (Decimal Degrees) Longitude: -88.57342 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.23227 Longitude: - 88.57342

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-08-B01 through 2790V-08-B05 were sampled within the construction zone adjacent to ISGS #3696-8 (2 Sisters Antique Barn) (#2790V-7, Farmstead). Refer to PSI Report for ISGS #3696-8 (2 Sisters Antique Barn) (#2790V-7, Farmstead) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144627-1.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055899
STATE OF ILLINOIS

P.E or L.P.G Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-9 (Residences)					Comparison Criteria					
BORING	2790V-08-B01	2790V-08-B02	2790V-08-B03	2790V-08-B04	2790V-08-B05	MACs			TACO		
SAMPLE	2790V-08-B01 (0-5)	2790V-08-B02 (0-5)	2790V-08-B03 (0-5)	2790V-08-B04 (0-5)	2790V-08-B05 (0-5)						
MATRIX	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-5	0-5	0-5	0-5						
pH	8	7.9	7.8	7.7	8.1						
PID	--	--	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)											
2-Butanone (MEK)	ND U	ND U	0.0029 J	ND U	ND U	--	--	--	--	--	--
Acetone	ND U	ND U	0.025	ND U	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)											
Acenaphthene	0.015 J	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Anthracene	0.044	ND U	0.015 J	0.0091 J	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.32	0.013 J	0.054	0.042	0.022 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.43 †	0.014 J	0.058	0.046	0.025 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.68	0.022 J	0.085	0.065	0.034 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.37	0.013 J	0.046	0.034 J	0.021 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.23	ND U	0.026 J	0.02 J	0.014 J	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	0.088 J	ND U	46	--	--	46	4,100	--
Chrysene	0.43	0.016 J	0.057	0.047	0.023 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.064	ND U	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	0.79	0.02 J	0.099	0.064	0.031 J	3,100	--	--	3,100	82,000	--
Fluorene	0.017 J	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.31	0.0099 J	0.038	0.029 J	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	0.4	0.01 J	0.065	0.05	0.013 J	--	--	--	--	--	--
Pyrene	0.85	0.024 J	0.11	0.082	0.035 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)											
Antimony	0.61 J	0.39 J	0.26 J	ND U	0.54 J	5	--	--	31	82	--
Arsenic	2.4	2.9	3	2.3	2.4	11.3	13	--	13	61	--
Barium	45	73	49	50	62	1,500	--	--	5,500	14,000	--
Beryllium	0.4	0.43	0.41	0.43	0.58	22	--	--	160	410	--
Boron	3.8	4.5	4	6.2	4.9	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	0.45	ND U	5.2	--	--	78	200	--
Calcium	18,000	23,000	51,000	83,000	15,000	--	--	--	--	--	--
Chromium	14	12	12	12	14	21	--	--	230	690	--
Cobalt	7.8	5.5	6.6	4.2	7.8	20	--	--	4,700	12,000	--
Copper	9.8	12	12	15	13	2,900	--	--	2,900	8,200	--
Iron	11,000	10,000	10,000	9,800	13,000	15,000	15,900	--	--	--	--
Lead	43	57	77	88	22	107	--	--	400	700	--
Magnesium	12,000	14,000	21,000	33,000	9,800	325,000	--	--	--	730,000	--
Manganese	410	380	340	280	290	630	636	--	1,600	4,100	--
Mercury	0.021	0.031	0.03	0.036	0.021	0.89	--	--	10	0.1	--
Nickel	13	10	12	11	15	100	--	--	1,600	4,100	--
Potassium	820	860	760	860	1,100	--	--	--	--	--	--
Silver	0.17 J	0.15 J	0.14 J	0.097 J	0.21 J	4.4	--	--	390	1,000	--
Sodium	350	940	740	1,100	1,100	--	--	--	--	--	--
Vanadium	25	20	22	18	26	550	--	--	550	1,400	--
Zinc	37	47	45	62	36	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)											
Barium	0.38 J	0.46 J	0.43 J	0.33 J	0.39 J	--	--	--	--	--	2
Boron	ND U	0.056 J	0.051 J	0.055 J	0.055 J	--	--	--	--	--	2
Cadmium	0.0025 J	0.0024 J	0.0028 J	0.0025 J	0.0024 J	--	--	--	--	--	0.005
Lead	ND U	ND U	0.009 L	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.082	0.081	3.2 L	0.03	0.21 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	0.012 J	ND U	ND U	--	--	--	--	--	0.1
SPLP Metals (mg/L)											
Lead	NA	NA	0.26 L	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	NA	0.98 L	NA	1 L	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144627-1
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/16/2018 7:56:26 AM

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

Table of Contents

Job ID: 500-144627-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144627-1

Receipt
The samples were received on 5/1/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batches 430506 and 430647 recovered outside control limits for the following analyte: Chloroethane. This analyte was high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

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

Metals
Method(s) 6010B: The method blank for preparation batch 500-430382 and analytical batch 500-430649 contained Zinc above the reporting limit (RL). Associated samples 2790V-08-B01 (0-5) (500-144627-1), 2790V-08-B02 (0-5) (500-144627-2), 2790V-08-B03 (0-5) (500-144627-3), 2790V-08-B04 (0-5) (500-144627-4) and 2790V-08-B05 (0-5) (500-144627-5) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-1

Client Sample ID: 2790V-08-B01 (0-5) — Lab Sample ID: 500-144627-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.015	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.017	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.40		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.044		0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.79		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.85		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.32		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.43		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.68		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.23		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.43		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.31		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.064		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.37		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.61	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.4		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	45		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.8	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.8		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	9.8		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	43		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	410		0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	820		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.35	J B	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	0.17	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	350		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	37	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.082		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.069	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.021		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	8.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-08-B02 (0-5) — Lab Sample ID: 500-144627-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.010	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.020	J	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.024	J	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.013	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.016	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-08-B02 (0-5) (Continued)

Lab Sample ID: 500-144627-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.022	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.014	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.0099	J	0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.013	J	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.39	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.9		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	73		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	4.5	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	23000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.5		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	57		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000		5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	380		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	10		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	860		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	940		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	47	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.46	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.056	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.081		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.035	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.031		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-08-B03 (0-5)

Lab Sample ID: 500-144627-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.025		0.018	0.0078	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0029	J	0.0045	0.0020	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.065		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.015	J	0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.099		0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.11		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.054		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.057		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.085		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.026	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.058		0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.038		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.046		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.0		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-08-B03 (0-5) (Continued) — Lab Sample ID: 500-144627-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	49		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.41		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.0	B	2.7	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.22	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	51000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	12		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.6		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	77		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000		5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	760		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Silver	0.14	J	0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	740		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	45	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0028	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.0090		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	3.2		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.031	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.26		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.98		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-08-B04 (0-5) — Lab Sample ID: 500-144627-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.050		0.041	0.0057	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0091	J	0.041	0.0069	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.064		0.041	0.0076	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.082		0.041	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.042		0.041	0.0055	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.047		0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.088	J	0.21	0.075	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.065		0.041	0.0089	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.020	J	0.041	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.046		0.041	0.0080	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.029	J	0.041	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.034	J	0.041	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.3		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	50		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	6.2	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.45	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-08-B04 (0-5) (Continued) — Lab Sample ID: 500-144627-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	83000	B	120	20	mg/Kg	10	☼	6010B	Total/NA
Chromium	12		0.58	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.2		0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	9800		12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	88		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.58	0.084	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	860		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.097	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	62	B	1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.030		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.16	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.036		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-08-B05 (0-5) — Lab Sample ID: 500-144627-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.013	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.031	J	0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.035	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.022	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.023	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.034	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.014	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.025	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.021	J	0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.54	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.4		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	62		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	4.9	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.8		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9800		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	290		0.57	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		28	10	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-08-B05 (0-5) (Continued)

Lab Sample ID: 500-144627-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.21	J	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	1100		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	36	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.39	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.041	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144627-1	2790V-08-B01 (0-5)	Solid	05/01/18 12:15	05/01/18 16:50
500-144627-2	2790V-08-B02 (0-5)	Solid	05/01/18 12:25	05/01/18 16:50
500-144627-3	2790V-08-B03 (0-5)	Solid	05/01/18 12:40	05/01/18 16:50
500-144627-4	2790V-08-B04 (0-5)	Solid	05/01/18 12:50	05/01/18 16:50
500-144627-5	2790V-08-B05 (0-5)	Solid	05/01/18 13:05	05/01/18 16:50

Client Sample ID: 2790V-08-B01 (0-5)
Date Collected: 05/01/18 12:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-1
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1
Xylenes, Total	<0.0032		0.0032	0.00050	mg/Kg	☼	05/01/18 17:47	05/03/18 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/01/18 17:47*	*05/03/18 20:34*	*1*
Dibromofluoromethane	*101*		*75 - 126*	*05/01/18 17:47*	*05/03/18 20:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 134*	*05/01/18 17:47*	*05/03/18 20:34*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/01/18 17:47*	*05/03/18 20:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1

Client Sample ID: 2790V-08-B01 (0-5)
Date Collected: 05/01/18 12:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-1
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Acenaphthene	**0.015**	**J**	0.037	0.0067	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Fluorene	**0.017**	**J**	0.037	0.0052	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Phenanthrene	**0.40**		0.037	0.0052	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Anthracene	**0.044**		0.037	0.0062	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Fluoranthene	**0.79**		0.037	0.0069	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Pyrene	**0.85**		0.037	0.0074	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Benzo[a]anthracene	**0.32**		0.037	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1

Client Sample ID: 2790V-08-B01 (0-5)
Date Collected: 05/01/18 12:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-1
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.43**		0.037	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Benzo[b]fluoranthene	**0.68**		0.037	0.0080	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Benzo[k]fluoranthene	**0.23**		0.037	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Benzo[a]pyrene	**0.43**		0.037	0.0072	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Indeno[1,2,3-cd]pyrene	**0.31**		0.037	0.0096	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Dibenz(a,h)anthracene	**0.064**		0.037	0.0072	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
Benzo[g,h,i]perylene	**0.37**		0.037	0.012	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/03/18 07:14	05/03/18 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*110*		*46 - 133*	*05/03/18 07:14*	*05/03/18 19:50*	*1*
Phenol-d5	*91*		*46 - 125*	*05/03/18 07:14*	*05/03/18 19:50*	*1*
Nitrobenzene-d5	*99*		*41 - 120*	*05/03/18 07:14*	*05/03/18 19:50*	*1*
2-Fluorobiphenyl	*100*		*44 - 121*	*05/03/18 07:14*	*05/03/18 19:50*	*1*
2,4,6-Tribromophenol	*75*		*25 - 139*	*05/03/18 07:14*	*05/03/18 19:50*	*1*
Terphenyl-d14	*119*		*35 - 160*	*05/03/18 07:14*	*05/03/18 19:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.61**	**J**	1.1	0.21	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Arsenic	**2.4**		0.55	0.19	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Barium	**45**		0.55	0.062	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Beryllium	**0.40**		0.22	0.051	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Boron	**3.8**	**B**	2.7	0.25	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Cadmium	**0.21**	**B**	0.11	0.020	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Calcium	**18000**	**B**	11	1.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Chromium	**14**		0.55	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Cobalt	**7.8**		0.27	0.072	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Copper	**9.8**		0.55	0.15	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Iron	**11000**		11	5.7	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Lead	**43**		0.27	0.13	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Magnesium	**12000**		5.5	2.7	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Manganese	**410**		0.55	0.079	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Nickel	**13**		0.55	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Potassium	**820**		27	9.7	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Selenium	**0.35**	**J B**	0.55	0.32	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Silver	**0.17**	**J**	0.27	0.070	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Sodium	**350**		55	8.1	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Vanadium	**25**		0.27	0.064	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1
Zinc	**37**	**B**	1.1	0.48	mg/Kg	☼	05/02/18 16:07	05/03/18 23:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.38**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 12:32	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 12:32	1
Boron	<0.50		0.50	0.050	mg/L		05/08/18 15:28	05/09/18 12:32	1

Client Sample ID: 2790V-08-B01 (0-5)
Date Collected: 05/01/18 12:15
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-1
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0025**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 12:32	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:32	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:32	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 12:32	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 12:32	1
Manganese	**0.082**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:32	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:32	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 12:32	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:32	1
Zinc	**0.069**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 12:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.017	0.0056	mg/Kg	☼	05/08/18 17:30	05/09/18 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.0**		0.20	0.20	SU			05/02/18 15:54	1

Client Sample ID: 2790V-08-B02 (0-5)
Date Collected: 05/01/18 12:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-2
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/01/18 17:47*	*05/03/18 21:01*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/01/18 17:47*	*05/03/18 21:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/01/18 17:47*	*05/03/18 21:01*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/01/18 17:47*	*05/03/18 21:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-1

Client Sample ID: 2790V-08-B02 (0-5)
Date Collected: 05/01/18 12:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-2
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Phenanthrene	**0.010**	**J**	0.038	0.0053	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Fluoranthene	**0.020**	**J**	0.038	0.0070	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Pyrene	**0.024**	**J**	0.038	0.0075	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Benzo[a]anthracene	**0.013**	**J**	0.038	0.0051	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1

Client Sample ID: 2790V-08-B02 (0-5)
Date Collected: 05/01/18 12:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-2
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.016**	**J**	0.038	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Benzo[b]fluoranthene	**0.022**	**J**	0.038	0.0082	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Benzo[a]pyrene	**0.014**	**J**	0.038	0.0073	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Indeno[1,2,3-cd]pyrene	**0.0099**	**J**	0.038	0.0098	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
Benzo[g,h,i]perylene	**0.013**	**J**	0.038	0.012	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*106*		*46 - 133*	*05/03/18 07:14*	*05/03/18 20:18*	*1*
Phenol-d5	*89*		*46 - 125*	*05/03/18 07:14*	*05/03/18 20:18*	*1*
Nitrobenzene-d5	*99*		*41 - 120*	*05/03/18 07:14*	*05/03/18 20:18*	*1*
2-Fluorobiphenyl	*95*		*44 - 121*	*05/03/18 07:14*	*05/03/18 20:18*	*1*
2,4,6-Tribromophenol	*78*		*25 - 139*	*05/03/18 07:14*	*05/03/18 20:18*	*1*
Terphenyl-d14	*114*		*35 - 160*	*05/03/18 07:14*	*05/03/18 20:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.39**	**J**	1.1	0.22	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Arsenic	**2.9**		0.56	0.19	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Barium	**73**		0.56	0.064	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Beryllium	**0.43**		0.22	0.052	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Boron	**4.5**	**B**	2.8	0.26	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Cadmium	**0.28**	**B**	0.11	0.020	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Calcium	**23000**	**B**	11	1.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Chromium	**12**		0.56	0.28	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Cobalt	**5.5**		0.28	0.073	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Copper	**12**		0.56	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Iron	**10000**		11	5.8	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Lead	**57**		0.28	0.13	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Magnesium	**14000**		5.6	2.8	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Manganese	**380**		0.56	0.081	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Nickel	**10**		0.56	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Potassium	**860**		28	9.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Silver	**0.15**	**J**	0.28	0.072	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Sodium	**940**		56	8.3	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Vanadium	**20**		0.28	0.066	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1
Zinc	**47**	**B**	1.1	0.49	mg/Kg	☼	05/02/18 16:07	05/03/18 23:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.46**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 12:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 12:39	1
Boron	**0.056**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 12:39	1

Client Sample ID: 2790V-08-B02 (0-5)
Date Collected: 05/01/18 12:25
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-2
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0024**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 12:39	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:39	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:39	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 12:39	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 12:39	1
Manganese	**0.081**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:39	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:39	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 12:39	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:39	1
Zinc	**0.035**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 12:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:45	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:45	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.019	0.0063	mg/Kg	☼	05/08/18 17:30	05/09/18 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.9**		0.20	0.20	SU			05/02/18 15:57	1

Client Sample ID: 2790V-08-B03 (0-5)

Date Collected: 05/01/18 12:40
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-3

Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.025**		0.018	0.0078	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
2-Butanone (MEK)	**0.0029**	**J**	0.0045	0.0020	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/01/18 17:47*	*05/03/18 21:27*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/01/18 17:47*	*05/03/18 21:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*05/01/18 17:47*	*05/03/18 21:27*	*1*
Toluene-d8 (Surr)	*99*		*75 - 124*	*05/01/18 17:47*	*05/03/18 21:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1

Client Sample ID: 2790V-08-B03 (0-5)
Date Collected: 05/01/18 12:40
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-3
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Phenanthrene	**0.065**		0.038	0.0053	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Anthracene	**0.015**	**J**	0.038	0.0063	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Fluoranthene	**0.099**		0.038	0.0070	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Pyrene	**0.11**		0.038	0.0075	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Benzo[a]anthracene	**0.054**		0.038	0.0051	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1

Client Sample ID: 2790V-08-B03 (0-5)
Date Collected: 05/01/18 12:40
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-3
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.057**		0.038	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Benzo[b]fluoranthene	**0.085**		0.038	0.0082	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Benzo[k]fluoranthene	**0.026**	**J**	0.038	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Benzo[a]pyrene	**0.058**		0.038	0.0073	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Indeno[1,2,3-cd]pyrene	**0.038**		0.038	0.0098	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
Benzo[g,h,i]perylene	**0.046**		0.038	0.012	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*110*		*46 - 133*	*05/03/18 07:14*	*05/03/18 20:45*	*1*
Phenol-d5	*95*		*46 - 125*	*05/03/18 07:14*	*05/03/18 20:45*	*1*
Nitrobenzene-d5	*100*		*41 - 120*	*05/03/18 07:14*	*05/03/18 20:45*	*1*
2-Fluorobiphenyl	*100*		*44 - 121*	*05/03/18 07:14*	*05/03/18 20:45*	*1*
2,4,6-Tribromophenol	*76*		*25 - 139*	*05/03/18 07:14*	*05/03/18 20:45*	*1*
Terphenyl-d14	*115*		*35 - 160*	*05/03/18 07:14*	*05/03/18 20:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.1	0.21	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Arsenic	**3.0**		0.55	0.19	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Barium	**49**		0.55	0.063	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Beryllium	**0.41**		0.22	0.051	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Boron	**4.0**	**B**	2.7	0.26	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Cadmium	**0.22**	**B**	0.11	0.020	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Calcium	**51000**	**B**	110	19	mg/Kg	☼	05/02/18 16:07	05/04/18 23:37	10
Chromium	**12**		0.55	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Cobalt	**6.6**		0.27	0.072	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Copper	**12**		0.55	0.15	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Iron	**10000**		11	5.7	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Lead	**77**		0.27	0.13	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Magnesium	**21000**		5.5	2.7	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Manganese	**340**		0.55	0.080	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Nickel	**12**		0.55	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Potassium	**760**		27	9.7	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Silver	**0.14**	**J**	0.27	0.071	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Sodium	**740**		55	8.1	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Vanadium	**22**		0.27	0.065	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1
Zinc	**45**	**B**	1.1	0.48	mg/Kg	☼	05/02/18 16:07	05/03/18 23:40	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.43**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 12:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 12:58	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 12:58	1

Client Sample ID: 2790V-08-B03 (0-5)
Date Collected: 05/01/18 12:40
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-3
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0028**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 12:58	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:58	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:58	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 12:58	1
Lead	**0.0090**		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 12:58	1
Manganese	**3.2**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:58	1
Nickel	**0.012**	**J**	0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:58	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 12:58	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 12:58	1
Zinc	**0.031**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 12:58	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.26**		0.0075	0.0075	mg/L		05/08/18 16:22	05/10/18 04:44	1
Manganese	**0.98**		0.025	0.010	mg/L		05/08/18 16:22	05/10/18 04:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:46	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.030**		0.018	0.0059	mg/Kg	☼	05/08/18 17:30	05/09/18 15:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.8**		0.20	0.20	SU			05/02/18 15:59	1

Client Sample ID: 2790V-08-B04 (0-5)
Date Collected: 05/01/18 12:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-4
Matrix: Solid
Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Chloroethane	<0.0042	*	0.0042	0.0012	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Vinyl acetate	<0.0042		0.0042	0.0015	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/01/18 17:47	05/03/18 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*75 - 131*	*05/01/18 17:47*	*05/03/18 21:54*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*05/01/18 17:47*	*05/03/18 21:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*05/01/18 17:47*	*05/03/18 21:54*	*1*
Toluene-d8 (Surr)	*102*		*75 - 124*	*05/01/18 17:47*	*05/03/18 21:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.091	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-1

Client Sample ID: 2790V-08-B04 (0-5)
Date Collected: 05/01/18 12:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-4
Matrix: Solid
Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Phenanthrene	**0.050**		0.041	0.0057	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Anthracene	**0.0091**	**J**	0.041	0.0069	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Fluoranthene	**0.064**		0.041	0.0076	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Pyrene	**0.082**		0.041	0.0082	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Benzo[a]anthracene	**0.042**		0.041	0.0055	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1

Client Sample ID: 2790V-08-B04 (0-5)
Date Collected: 05/01/18 12:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-4
Matrix: Solid
Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.047**		0.041	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Bis(2-ethylhexyl) phthalate	**0.088**	**J**	0.21	0.075	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Benzo[b]fluoranthene	**0.065**		0.041	0.0089	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Benzo[k]fluoranthene	**0.020**	**J**	0.041	0.012	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Benzo[a]pyrene	**0.046**		0.041	0.0080	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Indeno[1,2,3-cd]pyrene	**0.029**	**J**	0.041	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
Benzo[g,h,i]perylene	**0.034**	**J**	0.041	0.013	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	05/03/18 07:14	05/03/18 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*110*		*46 - 133*	*05/03/18 07:14*	*05/03/18 21:13*	*1*
Phenol-d5	*90*		*46 - 125*	*05/03/18 07:14*	*05/03/18 21:13*	*1*
Nitrobenzene-d5	*101*		*41 - 120*	*05/03/18 07:14*	*05/03/18 21:13*	*1*
2-Fluorobiphenyl	*101*		*44 - 121*	*05/03/18 07:14*	*05/03/18 21:13*	*1*
2,4,6-Tribromophenol	*79*		*25 - 139*	*05/03/18 07:14*	*05/03/18 21:13*	*1*
Terphenyl-d14	*112*		*35 - 160*	*05/03/18 07:14*	*05/03/18 21:13*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.22	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Arsenic	**2.3**		0.58	0.20	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Barium	**50**		0.58	0.066	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Beryllium	**0.43**		0.23	0.054	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Boron	**6.2**	**B**	2.9	0.27	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Cadmium	**0.45**	**B**	0.12	0.021	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Calcium	**83000**	**B**	120	20	mg/Kg	☼	05/02/18 16:07	05/04/18 23:41	10
Chromium	**12**		0.58	0.29	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Cobalt	**4.2**		0.29	0.076	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Copper	**15**		0.58	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Iron	**9800**		12	6.0	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Lead	**88**		0.29	0.13	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Magnesium	**33000**		5.8	2.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Manganese	**280**		0.58	0.084	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Nickel	**11**		0.58	0.17	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Potassium	**860**		29	10	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Silver	**0.097**	**J**	0.29	0.074	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Sodium	**1100**		58	8.5	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Vanadium	**18**		0.29	0.068	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1
Zinc	**62**	**B**	1.2	0.51	mg/Kg	☼	05/02/18 16:07	05/03/18 23:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.33**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 13:02	1
Boron	**0.055**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:02	1

Client Sample ID: 2790V-08-B04 (0-5)
Date Collected: 05/01/18 12:50
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-4
Matrix: Solid
Percent Solids: 79.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0025**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 13:02	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:02	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:02	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 13:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 13:02	1
Manganese	**0.030**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:02	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 13:02	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:02	1
Zinc	**0.16**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 13:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:47	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.036**		0.019	0.0064	mg/Kg	☼	05/08/18 17:30	05/09/18 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.7**		0.20	0.20	SU			05/02/18 16:02	1

Client Sample ID: 2790V-08-B05 (0-5)
Date Collected: 05/01/18 13:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-5
Matrix: Solid
Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0090	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Chloroethane	<0.0051	*	0.0051	0.0015	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Chloroform	<0.0021		0.0021	0.00071	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Chloromethane	<0.0051		0.0051	0.0021	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Dibromochloromethane	<0.0021		0.0021	0.00067	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00072	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00060	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00091	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00072	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00088	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Vinyl acetate	<0.0051		0.0051	0.0018	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	05/01/18 17:47	05/03/18 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/01/18 17:47*	*05/03/18 22:20*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/01/18 17:47*	*05/03/18 22:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 134*	*05/01/18 17:47*	*05/03/18 22:20*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*	*05/01/18 17:47*	*05/03/18 22:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.086	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1

Client Sample ID: 2790V-08-B05 (0-5)
Date Collected: 05/01/18 13:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-5
Matrix: Solid
Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Phenanthrene	**0.013**	**J**	0.039	0.0054	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Fluoranthene	**0.031**	**J**	0.039	0.0072	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Pyrene	**0.035**	**J**	0.039	0.0077	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Benzo[a]anthracene	**0.022**	**J**	0.039	0.0052	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1

Client Sample ID: 2790V-08-B05 (0-5)
Date Collected: 05/01/18 13:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-5
Matrix: Solid
Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.023**	**J**	0.039	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Benzo[b]fluoranthene	**0.034**	**J**	0.039	0.0084	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Benzo[k]fluoranthene	**0.014**	**J**	0.039	0.011	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Benzo[a]pyrene	**0.025**	**J**	0.039	0.0075	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
Benzo[g,h,i]perylene	**0.021**	**J**	0.039	0.012	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/03/18 07:14	05/03/18 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*100*		*46 - 133*	*05/03/18 07:14*	*05/03/18 21:40*	*1*
Phenol-d5	*100*		*46 - 125*	*05/03/18 07:14*	*05/03/18 21:40*	*1*
Nitrobenzene-d5	*92*		*41 - 120*	*05/03/18 07:14*	*05/03/18 21:40*	*1*
2-Fluorobiphenyl	*96*		*44 - 121*	*05/03/18 07:14*	*05/03/18 21:40*	*1*
2,4,6-Tribromophenol	*68*		*25 - 139*	*05/03/18 07:14*	*05/03/18 21:40*	*1*
Terphenyl-d14	*108*		*35 - 160*	*05/03/18 07:14*	*05/03/18 21:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.54**	**J**	1.1	0.22	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Arsenic	**2.4**		0.57	0.19	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Barium	**62**		0.57	0.065	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Beryllium	**0.58**		0.23	0.053	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Boron	**4.9**	**B**	2.8	0.26	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Cadmium	**0.19**	**B**	0.11	0.020	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Calcium	**15000**	**B**	11	1.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Chromium	**14**		0.57	0.28	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Cobalt	**7.8**		0.28	0.074	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Copper	**13**		0.57	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Iron	**13000**		11	5.9	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Lead	**22**		0.28	0.13	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Magnesium	**9800**		5.7	2.8	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Manganese	**290**		0.57	0.082	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Nickel	**15**		0.57	0.16	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Potassium	**1100**		28	10	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Silver	**0.21**	**J**	0.28	0.073	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Sodium	**1100**		57	8.4	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Vanadium	**26**		0.28	0.067	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1
Zinc	**36**	**B**	1.1	0.50	mg/Kg	☼	05/02/18 16:07	05/03/18 23:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.39**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:28	05/09/18 13:06	1
Boron	**0.055**	**J**	0.50	0.050	mg/L		05/08/18 15:28	05/09/18 13:06	1

Client Sample ID: 2790V-08-B05 (0-5)
Date Collected: 05/01/18 13:05
Date Received: 05/01/18 16:50

Lab Sample ID: 500-144627-5
Matrix: Solid
Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0024**	**J**	0.0050	0.0020	mg/L		05/08/18 15:28	05/09/18 13:06	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:06	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:06	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:28	05/09/18 13:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:28	05/09/18 13:06	1
Manganese	**0.21**		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:06	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:06	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:28	05/09/18 13:06	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:28	05/09/18 13:06	1
Zinc	**0.041**	**J B**	0.50	0.020	mg/L		05/08/18 15:28	05/09/18 13:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.0**		0.025	0.010	mg/L		05/08/18 16:22	05/10/18 05:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:28	05/09/18 11:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:28	05/09/18 11:48	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 12:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.018	0.0060	mg/Kg	☼	05/08/18 17:30	05/09/18 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.1**		0.20	0.20	SU			05/02/18 16:04	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144627-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

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

Bill To (optional)
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

500-144627 COC

Lab Job #: 500-144627
Chain of Custody Number:
Page 1 of 2
Temperature °C of Cooler: 5.1

Client: EFE
Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total Metals	% Solids pH						Comments
1		2790V-08-B01 (0-5)	5/1/18	1215	2	S	X	X	X	X						
2		2790V-08-B02 (0-5)		1225	2	S	X	X	X	X						
3		2790V-08-B03 (0-5)		1240	2	S	X	X	X	X						
4		2790V-08-B04 (0-5)		1250	2	S	X	X	X	X						
5		2790V-08-B05 (0-5)		1305	2	S	X	X	X	X						

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days __ Other
Requested Due Date ____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	EFE	5/1/18	1510	[signature]	TA	5/1/18	1510
[signature]	TA	5/1/18	1650	[signature]	TA	05/01/18	1650

Lab Courier ✓
Shipped
Hand Delivered

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

Client Comments:

Lab Comments:

TAL-1124-500 (1208)

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144627-1

Login Number: 144627
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7500 block of S. Grant Highway (ISGS #3696-12)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21878 (Decimal Degrees) Longitude: -88.56645 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21878 Longitude: - 88.56645

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Location 2790V-13-B01 was sampled within the construction zone adjacent to ISGS #3696-12 (#2790V-13, Vacant Land). Refer to PSI Report for ISGS #3696-12 (#2790V-13, Vacant Land) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-4.

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

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

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

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

Neil J. Brown
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

1/27/2020
Date:

P.E or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-12 (Vacant Land)	Comparison Criteria					
BORING	2790V-13-B01	MACs			TACO		
SAMPLE	2790V-13-B01 (0-4)						
MATRIX	Soil						
DEPTH (feet)	0-4						
pH	8.5						
PID	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (None Detected)							
SVOCs (mg/kg)							
Anthracene	**0.014** J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.092**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.13** †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.2**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.097**	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.072**	9	--	--	9	1,700	--
Chrysene	**0.11**	88	--	--	88	17,000	--
Fluoranthene	**0.2**	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.07**	0.9	1.6	0.9	1.6	170	--
Phenanthrene	**0.061**	--	--	--	--	--	--
Pyrene	**0.17**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)							
Antimony	**0.38** J	5	--	--	31	82	--
Arsenic	**2**	11.3	13	--	13	61	--
Barium	**31**	1,500	--	--	5,500	14,000	--
Beryllium	**0.39**	22	--	--	160	410	--
Boron	**7.3**	40	--	--	16,000	41,000	--
Calcium	**96,000**	--	--	--	--	--	--
Chromium	**15**	21	--	--	230	690	--
Cobalt	**4.2**	20	--	--	4,700	12,000	--
Copper	**15**	2,900	--	--	2,900	8,200	--
Iron	**8,600**	15,000	15,900	--	--	--	--
Lead	**38**	107	--	--	400	700	--
Magnesium	**44,000**	325,000	--	--	--	730,000	--
Manganese	**230**	630	636	--	1,600	4,100	--
Mercury	**0.01** J	0.89	--	--	10	0.1	--
Nickel	**11**	100	--	--	1,600	4,100	--
Potassium	**1,000**	--	--	--	--	--	--
Sodium	**630**	--	--	--	--	--	--
Vanadium	**17**	550	--	--	550	1,400	--
Zinc	**43**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)							
Barium	**0.33** J	--	--	--	--	--	2
Boron	**0.055** J	--	--	--	--	--	2
Iron	**0.21** J	--	--	--	--	--	5
Manganese	**0.16** L	--	--	--	--	--	0.15
SPLP Metals (mg/L)							
Manganese	**0.56** L	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-4
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 4:58:21 PM
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Designee for

Richard Wright, Senior Project Manager
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Table of Contents

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-4

Job ID: 500-144755-4

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-4

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-4

Client Sample ID: 2790V-13-B01 (0-4)

Lab Sample ID: 500-144755-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.061		0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.014	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.20		0.037	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.17		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.092		0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.11		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.20		0.037	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.072		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.037	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.070		0.037	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.097		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.38	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.0		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	31		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	7.3	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	96000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	15		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.2		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	15	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	8600	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	38		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	44000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	230	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.53	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1000		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Sodium	630		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.055	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.21	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.16		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.055	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.56		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.010	J	0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-6	2790V-13-B01 (0-4)	Solid	05/02/18 13:00	05/02/18 16:55

Client Sample ID: 2790V-13-B01 (0-4)
Date Collected: 05/02/18 13:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-6
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*05/02/18 18:15*	*05/11/18 01:56*	*1*
Dibromofluoromethane	*108*		*75 - 126*	*05/02/18 18:15*	*05/11/18 01:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/02/18 18:15*	*05/11/18 01:56*	*1*
Toluene-d8 (Surr)	*107*		*75 - 124*	*05/02/18 18:15*	*05/11/18 01:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.082	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1

Client Sample ID: 2790V-13-B01 (0-4)
Date Collected: 05/02/18 13:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-6
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
N-Nitrosodi-n-propylamine	<0.074	*	0.074	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Isophorone	<0.19		0.19	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Phenanthrene	**0.061**		0.037	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Anthracene	**0.014**	**J**	0.037	0.0062	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Fluoranthene	**0.20**		0.037	0.0068	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Pyrene	**0.17**		0.037	0.0073	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Benzo[a]anthracene	**0.092**		0.037	0.0050	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1

Client Sample ID: 2790V-13-B01 (0-4)
Date Collected: 05/02/18 13:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-6
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.11**		0.037	0.010	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Benzo[b]fluoranthene	**0.20**		0.037	0.0079	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Benzo[k]fluoranthene	**0.072**		0.037	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Benzo[a]pyrene	**0.13**		0.037	0.0071	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Indeno[1,2,3-cd]pyrene	**0.070**		0.037	0.0095	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
Benzo[g,h,i]perylene	**0.097**		0.037	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*117*		*46 - 133*	*05/08/18 06:51*	*05/10/18 06:06*	*1*
Phenol-d5	*120*		*46 - 125*	*05/08/18 06:51*	*05/10/18 06:06*	*1*
Nitrobenzene-d5	*120*		*41 - 120*	*05/08/18 06:51*	*05/10/18 06:06*	*1*
2-Fluorobiphenyl	*114*		*44 - 121*	*05/08/18 06:51*	*05/10/18 06:06*	*1*
2,4,6-Tribromophenol	*114*		*25 - 139*	*05/08/18 06:51*	*05/10/18 06:06*	*1*
Terphenyl-d14	*120*		*35 - 160*	*05/08/18 06:51*	*05/10/18 06:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.38**	**J**	1.1	0.21	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Arsenic	**2.0**		0.53	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Barium	**31**		0.53	0.061	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Beryllium	**0.39**		0.21	0.050	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Boron	**7.3**	**B**	2.7	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Cadmium	**0.21**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Calcium	**96000**	**B**	110	18	mg/Kg	☼	05/05/18 11:23	05/09/18 14:14	10
Chromium	**15**		0.53	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Cobalt	**4.2**		0.27	0.070	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Copper	**15**	**B**	0.53	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Iron	**8600**	**B**	11	5.5	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Lead	**38**		0.27	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Magnesium	**44000**		5.3	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Manganese	**230**	**B**	0.53	0.077	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Nickel	**11**		0.53	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Potassium	**1000**		27	9.4	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Silver	<0.27		0.27	0.069	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Sodium	**630**		53	7.9	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Vanadium	**17**		0.27	0.063	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1
Zinc	**43**		1.1	0.47	mg/Kg	☼	05/05/18 11:23	05/08/18 20:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.33**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:23	1
Boron	**0.055**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:23	1

Client Sample ID: 2790V-13-B01 (0-4)
Date Collected: 05/02/18 13:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-6
Matrix: Solid
Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:23	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:23	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:23	1
Iron	**0.21**	**J**	0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:23	1
Manganese	**0.16**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:23	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:23	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:23	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:23	1
Zinc	**0.055**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.56**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:01	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 15:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.018	0.0059	mg/Kg	☼	05/10/18 16:15	05/11/18 12:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.5**		0.20	0.20	SU			05/09/18 09:39	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-4

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

Chain of Custody Record

Lab Job #: 500-144755

Chain of Custody Number:

Page 4 of 8

Temperature °C of Cooler: 5.9

(optional) Report To	(optional) Bill To
Contact: D Tiebout	Contact:
Company:	Company:
Address:	Address:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail:	PO#/Reference#

Client: EFE	Client Project #: 1009341.0041.02	Preservative	
Project Name: FAP 525 (MS'20)		Parameter	
Project Location/State: McHenry Co, IL	Lab Project #		
Sampler: ETisher	Lab PM: R Wright		

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TAL/SPLP Total Metals	% Solids pH	Comments
6		2790V-13-B01(0-4)	5/2/18	1300	2	S	X	X	X	X	

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date:

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Company	Date	Time		Company	Date	Time
Relinquished By	EFE	5/2/18	1510	Received By	TA	5/2/18	1510
Relinquished By	TA	5/2/18	1655	Received By	TAHE	05/02/18	1655
Relinquished By				Received By			

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-4

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7520 S. Grant Highway (ISGS #3696-13)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21879 (Decimal Degrees) Longitude: -88.56619 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21879 Longitude: - 88.56619

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Location 2790V-14-B01 was sampled within the construction zone adjacent to ISGS #3696-13 (#2790V-14, Residence). Refer to PSI Report for ISGS #3696-13 (#2790V-14, Residence) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-3.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

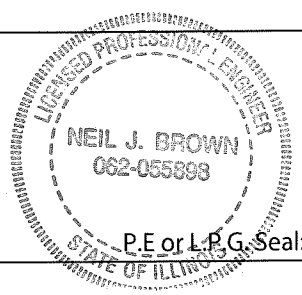
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

P.E or L.P.G. Seal:



Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-13 (Residence)	Comparison Criteria					
BORING	2790V-14-B01	MACs			TACO		
SAMPLE	2790V-14-B01 (0-3)						
MATRIX	Soil						
DEPTH (feet)	0-3						
pH	9	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
PID	--						
VOCs (None Detected)							
SVOCs (mg/kg)							
2-Methylnaphthalene	**0.0067 J**	--	--	--	--	--	--
Acenaphthylene	**0.0094 J**	--	--	--	--	--	--
Anthracene	**0.011 J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.047**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.05**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.082**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.025 J**	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.027 J**	9	--	--	9	1,700	--
Chrysene	**0.052**	88	--	--	88	17,000	--
Fluoranthene	**0.087**	3,100	--	--	3,100	82,000	--
Phenanthrene	**0.047**	--	--	--	--	--	--
Pyrene	**0.078**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)							
Arsenic	**2.7**	11.3	13	--	13	61	--
Barium	**35**	1,500	--	--	5,500	14,000	--
Beryllium	**0.46**	22	--	--	160	410	--
Boron	**6.3**	40	--	--	16,000	41,000	--
Calcium	**71,000**	--	--	--	--	--	--
Chromium	**11**	21	--	--	230	690	--
Cobalt	**5.9**	20	--	--	4,700	12,000	--
Copper	**220**	2,900	--	--	2,900	8,200	--
Iron	**9,800**	15,000	15,900	--	--	--	--
Lead	**42**	107	--	--	400	700	--
Magnesium	**30,000**	325,000	--	--	--	730,000	--
Manganese	**240**	630	636	--	1,600	4,100	--
Mercury	**0.027**	0.89	--	--	10	0.1	--
Nickel	**13**	100	--	--	1,600	4,100	--
Potassium	**1,100**	--	--	--	--	--	--
Silver	**0.11 J**	4.4	--	--	390	1,000	--
Sodium	**690**	--	--	--	--	--	--
Vanadium	**18**	550	--	--	550	1,400	--
Zinc	**71**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)							
Barium	**0.36 J**	--	--	--	--	--	2
Boron	**0.051 J**	--	--	--	--	--	2
Cadmium	**0.0025 J**	--	--	--	--	--	0.005
Iron	**0.27 J**	--	--	--	--	--	5
Manganese	**0.12**	--	--	--	--	--	0.15
SPLP Metals (mg/L)							
Manganese	**0.82 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-3
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 4:57:49 PM
Jodie Bracken, Project Management Assistant II
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Designee for

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Table of Contents

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-3

Job ID: 500-144755-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-3

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: 2790V-14-B01 (0-3) (500-144755-5), (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-3

Client Sample ID: 2790V-14-B01 (0-3)

Lab Sample ID: 500-144755-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.0067	J	0.073	0.0066	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0094	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.047		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.011	J	0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.087		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.078		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.047		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.052		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.082		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.027	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.050		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.7		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	35		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	6.3	B	2.6	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	71000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.9		0.26	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	220	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	9800	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	30000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	240	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		26	9.3	mg/Kg	1	☼	6010B	Total/NA
Silver	0.11	J	0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	690		53	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	71		1.1	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.27	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.12		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.057	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.82		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	9.0		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-5	2790V-14-B01 (0-3)	Solid	05/02/18 12:45	05/02/18 16:55

Client Sample ID: 2790V-14-B01 (0-3)
Date Collected: 05/02/18 12:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-5
Matrix: Solid
Percent Solids: 88.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0068	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Bromomethane	<0.0039	*	0.0039	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/02/18 18:15*	*05/11/18 01:28*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/02/18 18:15*	*05/11/18 01:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*	*05/02/18 18:15*	*05/11/18 01:28*	*1*
Toluene-d8 (Surr)	*92*		*75 - 124*	*05/02/18 18:15*	*05/11/18 01:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1

Client Sample ID: 2790V-14-B01 (0-3)
Date Collected: 05/02/18 12:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-5
Matrix: Solid
Percent Solids: 88.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
N-Nitrosodi-n-propylamine	<0.073	*	0.073	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2-Methylnaphthalene	**0.0067**	**J**	0.073	0.0066	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Acenaphthylene	**0.0094**	**J**	0.036	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Phenanthrene	**0.047**		0.036	0.0050	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Anthracene	**0.011**	**J**	0.036	0.0060	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Fluoranthene	**0.087**		0.036	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Pyrene	**0.078**		0.036	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Benzo[a]anthracene	**0.047**		0.036	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1

Client Sample ID: 2790V-14-B01 (0-3)
Date Collected: 05/02/18 12:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-5
Matrix: Solid
Percent Solids: 88.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.052**		0.036	0.0099	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Benzo[b]fluoranthene	**0.082**		0.036	0.0078	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Benzo[k]fluoranthene	**0.027**	**J**	0.036	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Benzo[a]pyrene	**0.050**		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
Benzo[g,h,i]perylene	**0.025**	**J**	0.036	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 05:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*121*		*46 - 133*	*05/08/18 06:51*	*05/10/18 05:40*	*1*
Phenol-d5	*129*	*X*	*46 - 125*	*05/08/18 06:51*	*05/10/18 05:40*	*1*
Nitrobenzene-d5	*113*		*41 - 120*	*05/08/18 06:51*	*05/10/18 05:40*	*1*
2-Fluorobiphenyl	*109*		*44 - 121*	*05/08/18 06:51*	*05/10/18 05:40*	*1*
2,4,6-Tribromophenol	*108*		*25 - 139*	*05/08/18 06:51*	*05/10/18 05:40*	*1*
Terphenyl-d14	*118*		*35 - 160*	*05/08/18 06:51*	*05/10/18 05:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Arsenic	**2.7**		0.53	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Barium	**35**		0.53	0.060	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Beryllium	**0.46**		0.21	0.049	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Boron	**6.3**	**B**	2.6	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Cadmium	**0.21**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Calcium	**71000**	**B**	110	18	mg/Kg	☼	05/05/18 11:23	05/09/18 14:11	10
Chromium	**11**		0.53	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Cobalt	**5.9**		0.26	0.069	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Copper	**220**	**B**	0.53	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Iron	**9800**	**B**	11	5.5	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Lead	**42**		0.26	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Magnesium	**30000**		5.3	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Manganese	**240**	**B**	0.53	0.077	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Nickel	**13**		0.53	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Potassium	**1100**		26	9.3	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Silver	**0.11**	**J**	0.26	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Sodium	**690**		53	7.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Vanadium	**18**		0.26	0.062	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1
Zinc	**71**		1.1	0.46	mg/Kg	☼	05/05/18 11:23	05/08/18 20:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.36**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:03	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:03	1

Client Sample ID: 2790V-14-B01 (0-3)
Date Collected: 05/02/18 12:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-5
Matrix: Solid
Percent Solids: 88.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0025**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:03	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:03	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:03	1
Iron	**0.27**	**J**	0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:03	1
Manganese	**0.12**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:03	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:03	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:03	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:03	1
Zinc	**0.057**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.82**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:00	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 15:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.017	0.0057	mg/Kg	☼	05/10/18 16:15	05/11/18 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**9.0**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-3

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755

Chain of Custody Number:

Page 3 of 8

Temperature °C of Cooler: 5.9

Client: E&E	Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)	
Project Location/State: McHenry Co, IL	Lab Project #:
Sampler: E Fisher	Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total metals	% solids pH					Comments
5		2790V-14-B01(0-3)	5/2/18	1245	2	S	X	X	X	X					

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days ____ Other
Requested Due Date ______

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	E&E	5/2/18	1510	P. Neal	TA	5/2/18	1510
P. Neal	TA	5/2/18	1455	[signature]	TAL-IL	05/02/18	1655

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-3

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7523 S. Grant Highway (ISGS #3696-14)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21827 (Decimal Degrees) Longitude: -88.56591 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21827 Longitude: - 88.56591

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-15-B01 and 2790V-15-B02 were sampled within the construction zone adjacent to ISGS #3696-14 (#2790V-15, Storage Building). Refer to PSI Report for ISGS #3696-14 (#2790V-15, Storage Building) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-5.

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

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

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

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

Neil J. Brown
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

1/27/2020
Date:

P.E. or L.P.G. Seal:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055693
STATE OF ILLINOIS

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-14 (Storage Building)		Comparison Criteria					
BORING	2790V-15-B01	2790V-15-B02	MACs			TACO		
SAMPLE	2790V-15-B01 (0-5)	2790V-15-B02 (0-5)						
MATRIX	Soil	Soil						
DEPTH (feet)	0-5	0-5						
pH	8.3	8.7						
PID	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)								
Acetone	ND U	**0.0083 J**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)								
2-Methylnaphthalene	**0.0079 J**	ND U	--	--	--	--	--	--
Acenaphthylene	**0.0058 J**	ND U	--	--	--	--	--	--
Anthracene	**0.015 J**	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.05**	**0.0072 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.051**	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.087**	ND U	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.025 J**	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.029 J**	ND U	9	--	--	9	1,700	--
Chrysene	**0.055**	ND U	88	--	--	88	17,000	--
Fluoranthene	**0.1**	**0.013 J**	3,100	--	--	3,100	82,000	--
Fluorene	**0.0061 J**	ND U	560	--	--	3,100	82,000	--
Phenanthrene	**0.065**	**0.013 J**	--	--	--	--	--	--
Pyrene	**0.089**	**0.011 J**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Arsenic	**3.2**	**3.1**	11.3	13	--	13	61	--
Barium	**38**	**60**	1,500	--	--	5,500	14,000	--
Beryllium	**0.45**	**0.7**	22	--	--	160	410	--
Boron	**4.8**	**6.7**	40	--	--	16,000	41,000	--
Cadmium	**0.33**	ND U	5.2	--	--	78	200	--
Calcium	**62,000**	**24,000**	--	--	--	--	--	--
Chromium	**14**	**16**	21	--	--	230	690	--
Cobalt	**5.1**	**7.4**	20	--	--	4,700	12,000	--
Copper	**17**	**16**	2,900	--	--	2,900	8,200	--
Iron	**11,000**	**14,000**	15,000	15,900	--	--	--	--
Lead	**82**	**11**	107	--	--	400	700	--
Magnesium	**32,000**	**16,000**	325,000	--	--	--	730,000	--
Manganese	**240**	**230**	630	636	--	1,600	4,100	--
Mercury	**0.039**	**0.0067 J**	0.89	--	--	10	0.1	--
Nickel	**12**	**20**	100	--	--	1,600	4,100	--
Potassium	**930**	**1,400**	--	--	--	--	--	--
Silver	**0.12 J**	**0.23 J**	4.4	--	--	390	1,000	--
Sodium	**690**	**410**	--	--	--	--	--	--
Vanadium	**21**	**25**	550	--	--	550	1,400	--
Zinc	**62**	**35**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.38 J**	**0.55**	--	--	--	--	--	2
Boron	**0.057 J**	**0.061 J**	--	--	--	--	--	2
Cadmium	**0.0027 J**	ND U	--	--	--	--	--	0.005
Iron	ND U	**0.34 J**	--	--	--	--	--	5
Manganese	**0.087**	**0.083**	--	--	--	--	--	0.15
SPLP Metals (Not Analyzed)								

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-5
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 4:58:52 PM
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Designee for

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Table of Contents

Job ID: 500-144755-5

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-5

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: 2790V-15-B02 (0-5) (500-144755-7), (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-5

Client Sample ID: 2790V-15-B02 (0-5) — Lab Sample ID: 500-144755-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0083	J	0.016	0.0068	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.013	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.013	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.011	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0072	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.1		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	60		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.70		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	6.7	B	2.6	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	24000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.4		0.26	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	16	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	16000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	230	B	0.53	0.076	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		26	9.3	mg/Kg	1	☼	6010B	Total/NA
Silver	0.23	J	0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	410		53	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	35		1.1	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Iron	0.34	J	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.083		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.042	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.0067	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-15-B01 (0-5) — Lab Sample ID: 500-144755-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.0079	J	0.073	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0058	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0061	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.065		0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.015	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.10		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.089		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.050		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.055		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.087		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.029	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.051		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.025	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.2		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	38		0.53	0.061	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-5

Client Sample ID: 2790V-15-B01 (0-5) (Continued)

Lab Sample ID: 500-144755-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.45		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	4.8	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.33	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	62000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	17	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	82		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	32000		5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	240	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.53	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	930		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	690		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.087		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.087	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.039		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-7	2790V-15-B02 (0-5)	Solid	05/02/18 13:15	05/02/18 16:55
500-144755-8	2790V-15-B01 (0-5)	Solid	05/02/18 13:25	05/02/18 16:55

Client Sample ID: 2790V-15-B02 (0-5)
Date Collected: 05/02/18 13:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-7
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0083	J	0.016	0.0068	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Bromomethane	<0.0039	*	0.0039	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Carbon disulfide	<0.0039		0.0039	0.00081	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Carbon tetrachloride	<0.0016		0.0016	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,2-Dichloropropane	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Toluene	<0.0016		0.0016	0.00039	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00069	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*	*05/02/18 18:15*	*05/11/18 02:22*	*1*
Dibromofluoromethane	*96*		*75 - 126*	*05/02/18 18:15*	*05/11/18 02:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*05/02/18 18:15*	*05/11/18 02:22*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/02/18 18:15*	*05/11/18 02:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1

Client Sample ID: 2790V-15-B02 (0-5)
Date Collected: 05/02/18 13:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-7
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
N-Nitrosodi-n-propylamine	<0.077	*	0.077	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Phenanthrene	**0.013**	**J**	0.038	0.0053	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Fluoranthene	**0.013**	**J**	0.038	0.0071	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Pyrene	**0.011**	**J**	0.038	0.0076	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Benzo[a]anthracene	**0.0072**	**J**	0.038	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1

Client Sample ID: 2790V-15-B02 (0-5)
Date Collected: 05/02/18 13:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-7
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/08/18 06:51	05/10/18 03:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*121*		*46 - 133*	*05/08/18 06:51*	*05/10/18 03:01*	*1*
Phenol-d5	*131*	*X*	*46 - 125*	*05/08/18 06:51*	*05/10/18 03:01*	*1*
Nitrobenzene-d5	*119*		*41 - 120*	*05/08/18 06:51*	*05/10/18 03:01*	*1*
2-Fluorobiphenyl	*114*		*44 - 121*	*05/08/18 06:51*	*05/10/18 03:01*	*1*
2,4,6-Tribromophenol	*80*		*25 - 139*	*05/08/18 06:51*	*05/10/18 03:01*	*1*
Terphenyl-d14	*122*		*35 - 160*	*05/08/18 06:51*	*05/10/18 03:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Arsenic	**3.1**		0.53	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Barium	**60**		0.53	0.060	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Beryllium	**0.70**		0.21	0.049	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Boron	**6.7**	**B**	2.6	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Cadmium	**0.15**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Calcium	**24000**	**B**	11	1.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Chromium	**16**		0.53	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Cobalt	**7.4**		0.26	0.069	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Copper	**16**	**B**	0.53	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Iron	**14000**	**B**	11	5.5	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Lead	**11**		0.26	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Magnesium	**16000**		5.3	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Manganese	**230**	**B**	0.53	0.076	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Nickel	**20**		0.53	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Potassium	**1400**		26	9.3	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Silver	**0.23**	**J**	0.26	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Sodium	**410**		53	7.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Vanadium	**25**		0.26	0.062	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1
Zinc	**35**		1.1	0.46	mg/Kg	☼	05/05/18 11:23	05/08/18 20:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.55**		0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:27	1
Boron	**0.061**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:27	1

Client Sample ID: 2790V-15-B02 (0-5)
Date Collected: 05/02/18 13:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-7
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:27	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:27	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:27	1
Iron	**0.34**	**J**	0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:27	1
Manganese	**0.083**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:27	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:27	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:27	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:27	1
Zinc	**0.042**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:02	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0067**	**J**	0.019	0.0063	mg/Kg	☼	05/10/18 16:15	05/11/18 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.7**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-15-B01 (0-5)
Date Collected: 05/02/18 13:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-8
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*75 - 131*	*05/02/18 18:15*	*05/11/18 02:48*	*1*
Dibromofluoromethane	*106*		*75 - 126*	*05/02/18 18:15*	*05/11/18 02:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 134*	*05/02/18 18:15*	*05/11/18 02:48*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/02/18 18:15*	*05/11/18 02:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1

Client Sample ID: 2790V-15-B01 (0-5)
Date Collected: 05/02/18 13:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-8
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
N-Nitrosodi-n-propylamine	<0.073	*	0.073	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2-Methylnaphthalene	**0.0079**	**J**	0.073	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Acenaphthylene	**0.0058**	**J**	0.036	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Fluorene	**0.0061**	**J**	0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Phenanthrene	**0.065**		0.036	0.0050	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Anthracene	**0.015**	**J**	0.036	0.0061	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Fluoranthene	**0.10**		0.036	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Pyrene	**0.089**		0.036	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Benzo[a]anthracene	**0.050**		0.036	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1

Client Sample ID: 2790V-15-B01 (0-5)
Date Collected: 05/02/18 13:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-8
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.055**		0.036	0.0099	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Benzo[b]fluoranthene	**0.087**		0.036	0.0078	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Benzo[k]fluoranthene	**0.029**	**J**	0.036	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Benzo[a]pyrene	**0.051**		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
Benzo[g,h,i]perylene	**0.025**	**J**	0.036	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*110*		*46 - 133*	*05/08/18 06:51*	*05/10/18 06:33*	*1*
Phenol-d5	*112*		*46 - 125*	*05/08/18 06:51*	*05/10/18 06:33*	*1*
Nitrobenzene-d5	*106*		*41 - 120*	*05/08/18 06:51*	*05/10/18 06:33*	*1*
2-Fluorobiphenyl	*104*		*44 - 121*	*05/08/18 06:51*	*05/10/18 06:33*	*1*
2,4,6-Tribromophenol	*107*		*25 - 139*	*05/08/18 06:51*	*05/10/18 06:33*	*1*
Terphenyl-d14	*121*		*35 - 160*	*05/08/18 06:51*	*05/10/18 06:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Arsenic	**3.2**		0.53	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Barium	**38**		0.53	0.061	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Beryllium	**0.45**		0.21	0.050	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Boron	**4.8**	**B**	2.7	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Cadmium	**0.33**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Calcium	**62000**	**B**	110	18	mg/Kg	☼	05/05/18 11:23	05/09/18 14:18	10
Chromium	**14**		0.53	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Cobalt	**5.1**		0.27	0.070	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Copper	**17**	**B**	0.53	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Iron	**11000**	**B**	11	5.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Lead	**82**		0.27	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Magnesium	**32000**		5.3	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Manganese	**240**	**B**	0.53	0.077	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Nickel	**12**		0.53	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Potassium	**930**		27	9.4	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Silver	**0.12**	**J**	0.27	0.069	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Sodium	**690**		53	7.9	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Vanadium	**21**		0.27	0.063	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1
Zinc	**62**		1.1	0.47	mg/Kg	☼	05/05/18 11:23	05/08/18 20:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.38**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:31	1
Boron	**0.057**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:31	1

Client Sample ID: 2790V-15-B01 (0-5)
Date Collected: 05/02/18 13:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-8
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0027**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:31	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:31	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:31	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:31	1
Manganese	**0.087**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:31	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:31	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:31	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:31	1
Zinc	**0.087**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:03	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.017	0.0057	mg/Kg	☼	05/10/18 16:15	05/11/18 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.3**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-5

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Chain of Custody Record

Lab Job #: 500-144755

Chain of Custody Number:

Page 5 of 8

Temperature °C of Cooler: 5.9

(optional) Report To	(optional) Bill To
Contact: D Thebout	Contact:
Company:	Company:
Address:	Address:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail:	PO#/Reference#

Client	Client Project #	Preservative
EAE	1009341.0041.02	
Project Name		Parameter
EAP 525 (hs 20)		
Project Location/State	Lab Project #	
McHenry Co, IL		
Sampler	Lab PM	
E Fisher	R Wright	

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TAL/SPLP Total metals	% solids pH						Comments
7		2790V-15-B02(0-5)	5/2/18	1315	2	S	X	X	X	X						
8		2790V-15-B01(0-5)	5/2/18	1325	2	S	X	X	X	X						

Turnaround Time Required (Business Days)

__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days _____ Other

Requested Due Date _____

Sample Disposal

[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EAE	5/2/18	1510	R Neal	TA	5/2/18	1510
R Neal	TA	5/2/18	1655	Ariel Sandy	TALHF	05/02/18	1655

Lab Courier: TA

Shipped:

Hand Delivered:

Matrix Key

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-5

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7604 S. Grant Highway (ISGS #3696-16)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.2181 (Decimal Degrees) Longitude: -88.56557 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21810 Longitude: - 88.56557

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Location 2790V-17-B01 was sampled within the construction zone adjacent to ISGS #3696-16 (#2790V-17, Residence). Refer to PSI Report for ISGS #3696-16 (#2790V-17, Residence) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-1.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

P.E. or L.P.G. Seal:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055998
STATE OF ILLINOIS

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-16 (Residence)		Comparison Criteria					
BORING	2790V-17-B01		MACs			TACO		
SAMPLE	2790V-17-B01 (0-3)							
MATRIX	Soil							
DEPTH (feet)	0-3							
pH	8.8		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
PID	--							
VOCs (mg/kg)								
Acetone	**0.017**		25	--	--	70,000	100,000	--
SVOCs (mg/kg)								
2-Methylnaphthalene	ND	U	--	--	--	--	--	--
Acenaphthene	**0.0075**	**J**	570	--	--	4,700	120,000	--
Acenaphthylene	ND	U	--	--	--	--	--	--
Anthracene	**0.019**	**J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.091**	**J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.13**	**†**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.19**		0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.12**		--	--	--	--	--	--
Benzo(k)fluoranthene	**0.06**		9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND	U	46	--	--	46	4,100	--
Chrysene	**0.11**		88	--	--	88	17,000	--
Fluoranthene	**0.16**		3,100	--	--	3,100	82,000	--
Fluorene	**0.0073**	**J**	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.093**		0.9	1.6	0.9	1.6	170	--
Naphthalene	ND	U	1.8	--	--	170	1.8	--
Phenanthrene	**0.081**		--	--	--	--	--	--
Pyrene	**0.18**		2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	ND	UJ	5	--	--	31	82	--
Arsenic	**2.7**	**J**	11.3	13	--	13	61	--
Barium	**44**		1,500	--	--	5,500	14,000	--
Beryllium	**0.36**		22	--	--	160	410	--
Boron	**12**	**J**	40	--	--	16,000	41,000	--
Cadmium	ND	U	5.2	--	--	78	200	--
Calcium	**83,000**		--	--	--	--	--	--
Chromium	**12**	**J**	21	--	--	230	690	--
Cobalt	**4.5**		20	--	--	4,700	12,000	--
Copper	**14**	**J**	2,900	--	--	2,900	8,200	--
Iron	**9,300**		15,000	15,900	--	--	--	--
Lead	**94**	**J**	107	--	--	400	700	--
Magnesium	**37,000**		325,000	--	--	--	730,000	--
Manganese	**310**		630	636	--	1,600	4,100	--
Mercury	**0.071**		0.89	--	--	10	0.1	--
Nickel	**9.7**		100	--	--	1,600	4,100	--
Potassium	**750**	**J**	--	--	--	--	--	--
Silver	**0.096**	**J**	4.4	--	--	390	1,000	--
Sodium	**910**	**J**	--	--	--	--	--	--
Vanadium	**15**		550	--	--	550	1,400	--
Zinc	**57**	**J**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.43**	**J**	--	--	--	--	--	2
Boron	**0.081**	**J**	--	--	--	--	--	2
Cadmium	**0.0022**	**J**	--	--	--	--	--	0.005
Lead	ND	U	--	--	--	--	--	0.0075
Manganese	**3.1**	**L**	--	--	--	--	--	0.15
SPLP Metals (mg/L)								
Lead	NA		--	--	--	--	--	0.0075
Manganese	**1.1**	**L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-1
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 4:56:33 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-1

Job ID: 500-144755-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-1

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431534 recovered outside control limits for the following analytes: Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 431534 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-1

Client Sample ID: 2790V-17-B01 (0-3) — Lab Sample ID: 500-144755-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.017		0.015	0.0065	mg/Kg	1	☼	8260B	Total/NA
Acenaphthene	0.0075	J	0.037	0.0067	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0073	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.081		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.019	J	0.037	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.16		0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.18		0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.091	F1	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.11		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.19		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.060		0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.13		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.093		0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.7	F1 F2	0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.36		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	12	B F1	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	83000	B F2	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	12	F1	0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.5		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	14	B F1 F2	0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	9300	B F2	10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	94	F2	0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	37000	F2	5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.7		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	750	F1	26	9.2	mg/Kg	1	☼	6010B	Total/NA
Silver	0.096	J	0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	910	F1	52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	57	F1	1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	0.43	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.081	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	3.1		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.097	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.071		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-17-B02 (0-3) — Lab Sample ID: 500-144755-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.0088	J	0.034	0.0053	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.014	J	0.070	0.0064	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0079	J	0.034	0.0046	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0080	J	0.034	0.0062	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0084	J	0.034	0.0049	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Client Sample ID: 2790V-17-B02 (0-3) (Continued) — Lab Sample ID: 500-144755-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.21		0.034	0.0048	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.044		0.034	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.47		0.034	0.0064	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.41		0.034	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.21		0.034	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.28		0.034	0.0095	mg/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	0.23		0.17	0.063	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.47		0.034	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.11		0.034	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.24		0.034	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.14		0.034	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.17		0.034	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.25	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.4		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	19		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.22		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.6	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.41	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	94000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	17		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.4		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	20	B	0.52	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	9500	B	10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	520		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	46000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	220	B	0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.5		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	430		26	9.1	mg/Kg	1	☼	6010B	Total/NA
Silver	0.073	J	0.26	0.067	mg/Kg	1	☼	6010B	Total/NA
Sodium	600		52	7.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.0	0.45	mg/Kg	1	☼	6010B	Total/NA
Barium	0.28	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.052	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0041	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.16		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.76		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.31	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.70		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.24		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.056		0.016	0.0054	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-17-B03 (0-3) — Lab Sample ID: 500-144755-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.033	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0064	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.080		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.071		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-17-B03 (0-3) (Continued)

Lab Sample ID: 500-144755-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.038		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.057		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.095		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.028	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.057		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.034	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.062		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	1.9		0.50	0.17	mg/Kg	1	☼	6010B	Total/NA
Barium	22		0.50	0.057	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.25		0.20	0.047	mg/Kg	1	☼	6010B	Total/NA
Boron	5.1	B	2.5	0.23	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.10	0.018	mg/Kg	1	☼	6010B	Total/NA
Calcium	82000	B	100	17	mg/Kg	10	☼	6010B	Total/NA
Chromium	8.7		0.50	0.25	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.2		0.25	0.066	mg/Kg	1	☼	6010B	Total/NA
Copper	10	B	0.50	0.14	mg/Kg	1	☼	6010B	Total/NA
Iron	6600	B	10	5.2	mg/Kg	1	☼	6010B	Total/NA
Lead	71		0.25	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	39000		5.0	2.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	180	B	0.50	0.073	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.5		0.50	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	570		25	8.9	mg/Kg	1	☼	6010B	Total/NA
Silver	0.067	J	0.25	0.065	mg/Kg	1	☼	6010B	Total/NA
Sodium	690		50	7.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.25	0.059	mg/Kg	1	☼	6010B	Total/NA
Zinc	43		1.0	0.44	mg/Kg	1	☼	6010B	Total/NA
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Lead	0.014		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.66		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.35		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.71		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.037		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	9.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-1	2790V-17-B01 (0-3)	Solid	05/02/18 11:55	05/02/18 16:55
500-144755-2	2790V-17-B02 (0-3)	Solid	05/02/18 12:05	05/02/18 16:55
500-144755-3	2790V-17-B03 (0-3)	Solid	05/02/18 12:15	05/02/18 16:55

Client Sample ID: 2790V-17-B01 (0-3)
Date Collected: 05/02/18 11:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-1
Matrix: Solid
Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.017		0.015	0.0065	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,1,2,2-Tetrachloroethane	<0.0015	*	0.0015	0.00048	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/02/18 18:15	05/10/18 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/02/18 18:15*	*05/10/18 18:49*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/02/18 18:15*	*05/10/18 18:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*05/02/18 18:15*	*05/10/18 18:49*	*1*
Toluene-d8 (Surr)	*104*		*75 - 124*	*05/02/18 18:15*	*05/10/18 18:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1

Client Sample ID: 2790V-17-B01 (0-3)
Date Collected: 05/02/18 11:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-1
Matrix: Solid
Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
N-Nitrosodi-n-propylamine	<0.075	*	0.075	0.045	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2-Chloronaphthalene	<0.19	F1	0.19	0.041	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Acenaphthene	**0.0075**	**J**	0.037	0.0067	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Fluorene	**0.0073**	**J**	0.037	0.0052	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4-Bromophenyl phenyl ether	<0.19	F1	0.19	0.049	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Hexachlorobenzene	<0.075	F1	0.075	0.0086	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
N-Nitrosodiphenylamine	<0.19	F1	0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Phenanthrene	**0.081**		0.037	0.0052	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Anthracene	**0.019**	**J**	0.037	0.0062	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Fluoranthene	**0.16**		0.037	0.0069	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Pyrene	**0.18**		0.037	0.0074	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Butyl benzyl phthalate	<0.19	F1	0.19	0.071	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Benzo[a]anthracene	**0.091**	**F1**	0.037	0.0050	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1

Client Sample ID: 2790V-17-B01 (0-3)

Date Collected: 05/02/18 11:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-1

Matrix: Solid
Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.11**		0.037	0.010	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
3,3'-Dichlorobenzidine	<0.19	F1	0.19	0.052	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Bis(2-ethylhexyl) phthalate	<0.19	F1	0.19	0.068	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Benzo[b]fluoranthene	**0.19**		0.037	0.0080	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Benzo[k]fluoranthene	**0.060**		0.037	0.011	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Benzo[a]pyrene	**0.13**		0.037	0.0072	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Indeno[1,2,3-cd]pyrene	**0.093**		0.037	0.0096	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
Benzo[g,h,i]perylene	**0.12**		0.037	0.012	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/08/18 06:51	05/08/18 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*115*		*46 - 133*	*05/08/18 06:51*	*05/08/18 22:17*	*1*
Phenol-d5	*123*		*46 - 125*	*05/08/18 06:51*	*05/08/18 22:17*	*1*
Nitrobenzene-d5	*117*		*41 - 120*	*05/08/18 06:51*	*05/08/18 22:17*	*1*
2-Fluorobiphenyl	*113*		*44 - 121*	*05/08/18 06:51*	*05/08/18 22:17*	*1*
2,4,6-Tribromophenol	*96*		*25 - 139*	*05/08/18 06:51*	*05/08/18 22:17*	*1*
Terphenyl-d14	*132*		*35 - 160*	*05/08/18 06:51*	*05/08/18 22:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0	F1	1.0	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Arsenic	**2.7**	**F1 F2**	0.52	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Barium	**44**		0.52	0.059	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Beryllium	**0.36**		0.21	0.048	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Boron	**12**	**B F1**	2.6	0.24	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Cadmium	**0.28**	**B**	0.10	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Calcium	**83000**	**B F2**	100	18	mg/Kg	☼	05/05/18 11:23	05/09/18 13:32	10
Chromium	**12**	**F1**	0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Cobalt	**4.5**		0.26	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Copper	**14**	**B F1 F2**	0.52	0.14	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Iron	**9300**	**B F2**	10	5.4	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Lead	**94**	**F2**	0.26	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Magnesium	**37000**	**F2**	5.2	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Manganese	**310**	**B**	0.52	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Nickel	**9.7**		0.52	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Potassium	**750**	**F1**	26	9.2	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Selenium	<0.52	F1	0.52	0.30	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Silver	**0.096**	**J**	0.26	0.067	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Sodium	**910**	**F1**	52	7.7	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Thallium	<0.52	F1	0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Vanadium	**15**		0.26	0.061	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1
Zinc	**57**	**F1**	1.0	0.45	mg/Kg	☼	05/05/18 11:23	05/08/18 19:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.43**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 16:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 16:47	1
Boron	**0.081**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 16:47	1

Client Sample ID: 2790V-17-B01 (0-3)
Date Collected: 05/02/18 11:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-1
Matrix: Solid
Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0022**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 16:47	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:47	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:47	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 16:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 16:47	1
Manganese	**3.1**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:47	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:47	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 16:47	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:47	1
Zinc	**0.097**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.1**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 15:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 11:57	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 11:57	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 15:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.071**		0.018	0.0061	mg/Kg	☼	05/10/18 16:15	05/11/18 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-17-B02 (0-3)
Date Collected: 05/02/18 12:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-2
Matrix: Solid
Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0085	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Chloroethane	<0.0049	*	0.0049	0.0014	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,1,2,2-Tetrachloroethane	<0.0020	*	0.0020	0.00063	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	05/02/18 18:15	05/10/18 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 131*	*05/02/18 18:15*	*05/10/18 19:17*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/02/18 18:15*	*05/10/18 19:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/02/18 18:15*	*05/10/18 19:17*	*1*
Toluene-d8 (Surr)	*106*		*75 - 124*	*05/02/18 18:15*	*05/10/18 19:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1

Client Sample ID: 2790V-17-B02 (0-3)
Date Collected: 05/02/18 12:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-2
Matrix: Solid
Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
N-Nitrosodi-n-propylamine	<0.070	*	0.070	0.042	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Nitrobenzene	<0.034		0.034	0.0087	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.035	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Naphthalene	**0.0088**	**J**	0.034	0.0053	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2-Methylnaphthalene	**0.014**	**J**	0.070	0.0064	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4-Chloro-3-methylphenol	<0.34		0.34	0.12	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2-Nitrophenol	<0.34		0.34	0.082	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
3-Nitroaniline	<0.34		0.34	0.11	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Acenaphthylene	**0.0079**	**J**	0.034	0.0046	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Acenaphthene	**0.0080**	**J**	0.034	0.0062	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Fluorene	**0.0084**	**J**	0.034	0.0049	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4-Nitroaniline	<0.34		0.34	0.15	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.040	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Phenanthrene	**0.21**		0.034	0.0048	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Anthracene	**0.044**		0.034	0.0058	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Fluoranthene	**0.47**		0.034	0.0064	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Pyrene	**0.41**		0.034	0.0069	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Benzo[a]anthracene	**0.21**		0.034	0.0047	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1

Client Sample ID: 2790V-17-B02 (0-3)

Date Collected: 05/02/18 12:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-2

Matrix: Solid
Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.28**		0.034	0.0095	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Bis(2-ethylhexyl) phthalate	**0.23**		0.17	0.063	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Benzo[b]fluoranthene	**0.47**		0.034	0.0075	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Benzo[k]fluoranthene	**0.11**		0.034	0.010	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Benzo[a]pyrene	**0.24**		0.034	0.0067	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Indeno[1,2,3-cd]pyrene	**0.14**		0.034	0.0090	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0067	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
Benzo[g,h,i]perylene	**0.17**		0.034	0.011	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	05/08/18 06:51	05/08/18 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*114*		*46 - 133*	*05/08/18 06:51*	*05/08/18 23:38*	*1*
Phenol-d5	*116*		*46 - 125*	*05/08/18 06:51*	*05/08/18 23:38*	*1*
Nitrobenzene-d5	*118*		*41 - 120*	*05/08/18 06:51*	*05/08/18 23:38*	*1*
2-Fluorobiphenyl	*119*		*44 - 121*	*05/08/18 06:51*	*05/08/18 23:38*	*1*
2,4,6-Tribromophenol	*100*		*25 - 139*	*05/08/18 06:51*	*05/08/18 23:38*	*1*
Terphenyl-d14	*121*		*35 - 160*	*05/08/18 06:51*	*05/08/18 23:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.25**	**J**	1.0	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Arsenic	**2.4**		0.52	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Barium	**19**		0.52	0.059	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Beryllium	**0.22**		0.21	0.048	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Boron	**5.6**	**B**	2.6	0.24	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Cadmium	**0.41**	**B**	0.10	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Calcium	**94000**	**B**	100	18	mg/Kg	☼	05/05/18 11:23	05/09/18 13:59	10
Chromium	**17**		0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Cobalt	**3.4**		0.26	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Copper	**20**	**B**	0.52	0.14	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Iron	**9500**	**B**	10	5.4	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Lead	**520**		0.26	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Magnesium	**46000**		5.2	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Manganese	**220**	**B**	0.52	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Nickel	**8.5**		0.52	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Potassium	**430**		26	9.1	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Selenium	<0.52		0.52	0.30	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Silver	**0.073**	**J**	0.26	0.067	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Sodium	**600**		52	7.6	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Vanadium	**12**		0.26	0.061	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1
Zinc	**120**		1.0	0.45	mg/Kg	☼	05/05/18 11:23	05/08/18 19:48	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.28**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 16:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 16:51	1
Boron	**0.052**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 16:51	1

Client Sample ID: 2790V-17-B02 (0-3)
Date Collected: 05/02/18 12:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-2
Matrix: Solid
Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0041**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 16:51	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:51	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:51	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 16:51	1
Lead	**0.16**		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 16:51	1
Manganese	**0.76**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:51	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:51	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 16:51	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:51	1
Zinc	**0.31**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 16:51	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.70**		0.0075	0.0075	mg/L		05/08/18 16:27	05/10/18 15:51	1
Manganese	**0.24**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 11:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 11:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 15:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.056**		0.016	0.0054	mg/Kg	☼	05/10/18 16:15	05/11/18 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.1**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-17-B03 (0-3)
Date Collected: 05/02/18 12:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-3
Matrix: Solid
Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Carbon disulfide	<0.0038		0.0038	0.00078	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,1,2,2-Tetrachloroethane	<0.0015	*	0.0015	0.00048	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/02/18 18:15	05/10/18 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/02/18 18:15*	*05/10/18 19:44*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/02/18 18:15*	*05/10/18 19:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*05/02/18 18:15*	*05/10/18 19:44*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/02/18 18:15*	*05/10/18 19:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1

Client Sample ID: 2790V-17-B03 (0-3)
Date Collected: 05/02/18 12:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-3
Matrix: Solid
Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
N-Nitrosodi-n-propylamine	<0.073	*	0.073	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Phenanthrene	**0.033**	**J**	0.036	0.0050	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Anthracene	**0.0064**	**J**	0.036	0.0061	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Fluoranthene	**0.080**		0.036	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Pyrene	**0.071**		0.036	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Benzo[a]anthracene	**0.038**		0.036	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1

Client Sample ID: 2790V-17-B03 (0-3)
Date Collected: 05/02/18 12:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-3
Matrix: Solid
Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.057**		0.036	0.0099	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Benzo[b]fluoranthene	**0.095**		0.036	0.0078	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Benzo[k]fluoranthene	**0.028**	**J**	0.036	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Benzo[a]pyrene	**0.057**		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Indeno[1,2,3-cd]pyrene	**0.034**	**J**	0.036	0.0094	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
Benzo[g,h,i]perylene	**0.062**		0.036	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*113*		*46 - 133*	*05/08/18 06:51*	*05/10/18 04:47*	*1*
Phenol-d5	*117*		*46 - 125*	*05/08/18 06:51*	*05/10/18 04:47*	*1*
Nitrobenzene-d5	*107*		*41 - 120*	*05/08/18 06:51*	*05/10/18 04:47*	*1*
2-Fluorobiphenyl	*110*		*44 - 121*	*05/08/18 06:51*	*05/10/18 04:47*	*1*
2,4,6-Tribromophenol	*108*		*25 - 139*	*05/08/18 06:51*	*05/10/18 04:47*	*1*
Terphenyl-d14	*118*		*35 - 160*	*05/08/18 06:51*	*05/10/18 04:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Arsenic	**1.9**		0.50	0.17	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Barium	**22**		0.50	0.057	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Beryllium	**0.25**		0.20	0.047	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Boron	**5.1**	**B**	2.5	0.23	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Cadmium	**0.20**	**B**	0.10	0.018	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Calcium	**82000**	**B**	100	17	mg/Kg	☼	05/05/18 11:23	05/09/18 14:03	10
Chromium	**8.7**		0.50	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Cobalt	**3.2**		0.25	0.066	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Copper	**10**	**B**	0.50	0.14	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Iron	**6600**	**B**	10	5.2	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Lead	**71**		0.25	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Magnesium	**39000**		5.0	2.5	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Manganese	**180**	**B**	0.50	0.073	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Nickel	**7.5**		0.50	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Potassium	**570**		25	8.9	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Selenium	<0.50		0.50	0.29	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Silver	**0.067**	**J**	0.25	0.065	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Sodium	**690**		50	7.4	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Vanadium	**13**		0.25	0.059	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1
Zinc	**43**		1.0	0.44	mg/Kg	☼	05/05/18 11:23	05/08/18 19:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.35**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 16:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 16:55	1
Boron	**0.059**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 16:55	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-1

Client Sample ID: 2790V-17-B03 (0-3)
Date Collected: 05/02/18 12:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-3
Matrix: Solid
Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0024**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 16:55	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:55	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:55	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 16:55	1
Lead	**0.014**		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 16:55	1
Manganese	**0.66**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:55	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:55	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 16:55	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 16:55	1
Zinc	**0.13**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 16:55	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.35**		0.0075	0.0075	mg/L		05/08/18 16:27	05/10/18 15:55	1
Manganese	**0.71**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 11:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 11:58	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 15:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.017	0.0056	mg/Kg	☼	05/10/18 16:15	05/11/18 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**9.1**		0.20	0.20	SU			05/09/18 09:39	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755
Chain of Custody Number:
Page 1 of 8
Temperature °C of Cooler: 5.9

Client: EAE
Client Project #: 1009341.0041.02
Project Name: FAP 525 (ms20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Preservative
Parameter

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TAL PSAP	Total metals % solids pH					
1		2790V-17-B01(0-3)	5/2/18	1155	2	S	x	x	x	x					
2		2790V-17-B02(0-3)	"	1205	2	S	x	x	x	x					
3		2790V-17-B03(0-3)	"	1215	2	S	x	x	x	x					

500-144755 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days ___ Other
Requested Due Date

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1		EAE	5/2/18	1510	R Neal	TA	5/2/18	1510
2	P. Neal	TA	5/2/18	1655		TALHE	05/02/18	1655
3								

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

5/17/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-1

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7500 block of S. Grant Highway (ISGS #3696-17)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21795 (Decimal Degrees) Longitude: -88.56561 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21795 Longitude: - 88.56561

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Location 2790V-18-B01 was sampled within the construction zone adjacent to ISGS #3696-17 (#2790V-18, Vacant Land). Refer to PSI Report for ISGS #3696-17 (#2790V-18, Vacant Land) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-6.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

LICENSED PROFESSIONAL ENGINEER NEIL J. BROWN 062-055699 STATE OF ILLINOIS

P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-17 (Vacant Land)		Comparison Criteria					
BORING	2790V-18-B01		MACs			TACO		
SAMPLE	2790V-18-B01 (0-3)							
MATRIX	Soil							
DEPTH (feet)	0-3							
pH	8.1							
PID	--		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (None Detected)								
SVOCs (mg/kg)								
Acenaphthylene	**0.0049**	**J**	--	--	--	--	--	--
Anthracene	**0.0071**	**J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.025**	**J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.05**		0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.052**		0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.12**		--	--	--	--	--	--
Benzo(k)fluoranthene	**0.018**	**J**	9	--	--	9	1,700	--
Chrysene	**0.037**		88	--	--	88	17,000	--
Fluoranthene	**0.039**		3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.03**	**J**	0.9	1.6	0.9	1.6	170	--
Phenanthrene	**0.039**		--	--	--	--	--	--
Pyrene	**0.044**		2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Arsenic	**1.9**		11.3	13	--	13	61	--
Barium	**29**		1,500	--	--	5,500	14,000	--
Beryllium	**0.3**		22	--	--	160	410	--
Calcium	**64,000**		--	--	--	--	--	--
Chromium	**9.6**		21	--	--	230	690	--
Cobalt	**4.4**		20	--	--	4,700	12,000	--
Copper	**11**		2,900	--	--	2,900	8,200	--
Iron	**7,000**		15,000	15,900	--	--	--	--
Lead	**44**		107	--	--	400	700	--
Magnesium	**29,000**		325,000	--	--	--	730,000	--
Manganese	**260**		630	636	--	1,600	4,100	--
Mercury	**0.027**		0.89	--	--	10	0.1	--
Nickel	**7.6**		100	--	--	1,600	4,100	--
Potassium	**670**		--	--	--	--	--	--
Silver	**0.077**	**J**	4.4	--	--	390	1,000	--
Sodium	**360**		--	--	--	--	--	--
Vanadium	**14**		550	--	--	550	1,400	--
Zinc	**33**		5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.36**	**J**	--	--	--	--	--	2
Boron	**0.061**	**J**	--	--	--	--	--	2
Manganese	**0.35**	**L**	--	--	--	--	--	0.15
SPLP Metals (mg/L)								
Manganese	**0.68**	**L**	--	--	--	--	--	0.15

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-6
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 4:59:29 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-6

Job ID: 500-144755-6

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-6

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-6

Client Sample ID: 2790V-18-B01 (0-3)

Lab Sample ID: 500-144755-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0049	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.039		0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0071	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.039		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.044		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.025	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.037		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.052		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.018	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.050		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.030	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	1.9		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	29		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.30		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	3.9	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	64000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.6		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.4		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	7000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	44		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	29000		5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	260	B	0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.6		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	670		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.077	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	360		54	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	33		1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.36	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.35		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.13	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.68		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.027		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-6

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-9	2790V-18-B01 (0-3)	Solid	05/02/18 13:35	05/02/18 16:55

Client Sample ID: 2790V-18-B01 (0-3)
Date Collected: 05/02/18 13:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-9
Matrix: Solid
Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0091	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Bromomethane	<0.0052	*	0.0052	0.0020	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Chloroethane	<0.0052	*	0.0052	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00070	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/02/18 18:15*	*05/11/18 03:14*	*1*
Dibromofluoromethane	*103*		*75 - 126*	*05/02/18 18:15*	*05/11/18 03:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*05/02/18 18:15*	*05/11/18 03:14*	*1*
Toluene-d8 (Surr)	*111*		*75 - 124*	*05/02/18 18:15*	*05/11/18 03:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1

Client Sample ID: 2790V-18-B01 (0-3)
Date Collected: 05/02/18 13:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-9
Matrix: Solid
Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
N-Nitrosodi-n-propylamine	<0.073	*	0.073	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Acenaphthylene	**0.0049**	**J**	0.036	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Phenanthrene	**0.039**		0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Anthracene	**0.0071**	**J**	0.036	0.0061	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Fluoranthene	**0.039**		0.036	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Pyrene	**0.044**		0.036	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Benzo[a]anthracene	**0.025**	**J**	0.036	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1

Client Sample ID: 2790V-18-B01 (0-3)

Date Collected: 05/02/18 13:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-9

Matrix: Solid
Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.037**		0.036	0.0099	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Benzo[b]fluoranthene	**0.052**		0.036	0.0078	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Benzo[k]fluoranthene	**0.018**	**J**	0.036	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Benzo[a]pyrene	**0.050**		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Indeno[1,2,3-cd]pyrene	**0.030**	**J**	0.036	0.0094	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
Benzo[g,h,i]perylene	**0.12**		0.036	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 06:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*118*		*46 - 133*	*05/08/18 06:51*	*05/10/18 06:59*	*1*
Phenol-d5	*121*		*46 - 125*	*05/08/18 06:51*	*05/10/18 06:59*	*1*
Nitrobenzene-d5	*116*		*41 - 120*	*05/08/18 06:51*	*05/10/18 06:59*	*1*
2-Fluorobiphenyl	*110*		*44 - 121*	*05/08/18 06:51*	*05/10/18 06:59*	*1*
2,4,6-Tribromophenol	*107*		*25 - 139*	*05/08/18 06:51*	*05/10/18 06:59*	*1*
Terphenyl-d14	*125*		*35 - 160*	*05/08/18 06:51*	*05/10/18 06:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Arsenic	**1.9**		0.54	0.19	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Barium	**29**		0.54	0.062	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Beryllium	**0.30**		0.22	0.051	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Boron	**3.9**	**B**	2.7	0.25	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Cadmium	**0.19**	**B**	0.11	0.020	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Calcium	**64000**	**B**	110	18	mg/Kg	☼	05/05/18 11:23	05/09/18 14:22	10
Chromium	**9.6**		0.54	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Cobalt	**4.4**		0.27	0.071	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Copper	**11**	**B**	0.54	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Iron	**7000**	**B**	11	5.7	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Lead	**44**		0.27	0.13	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Magnesium	**29000**		5.4	2.7	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Manganese	**260**	**B**	0.54	0.079	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Nickel	**7.6**		0.54	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Potassium	**670**		27	9.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Silver	**0.077**	**J**	0.27	0.070	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Sodium	**360**		54	8.1	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Vanadium	**14**		0.27	0.064	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1
Zinc	**33**		1.1	0.48	mg/Kg	☼	05/05/18 11:23	05/08/18 20:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.36**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:35	1
Boron	**0.061**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:35	1

Client Sample ID: 2790V-18-B01 (0-3)

Date Collected: 05/02/18 13:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-9

Matrix: Solid
Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:35	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:35	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:35	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:35	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:35	1
Manganese	**0.35**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:35	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:35	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:35	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:35	1
Zinc	**0.13**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.68**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:06	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.017	0.0058	mg/Kg	☼	05/10/18 16:15	05/11/18 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.1**		0.20	0.20	SU			05/09/18 09:39	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-6

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755
Chain of Custody Number:
Page 6 of 8
Temperature °C of Cooler: 5.9

Client: E&E
Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total Metals	% Solids pH						Comments
						Preservative										
8		2790V-18-B01(0-3)	5/2/18	1335	2	S	X	X	X	X						

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days ____ Other
Requested Due Date ______

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	E&E	5/2/18	1510	R. Neal	TA	5/2/18	1510
R. Neal	TA	5/2/18	1655	[signature]	TALLIE	05/02/18	1655

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-6

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7613 S. Grant Highway (ISGS #3696-18)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21762 (Decimal Degrees) Longitude: -88.56526 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21762 Longitude: - 88.56526

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-20-B01 and 2790V-20-B02 were sampled within the construction zone adjacent to ISGS #3696-18 (#2790V-20, Vacant Land). Refer to PSI Report for ISGS #3696-18 (#2790V-20, Vacant Land) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-7.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

P.E or L.P.G. Seal:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055899
STATE OF ILLINOIS

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41
CONTAMINANTS OF CONCERN

SITE	ISGS #3696-18 (Vacant Land)		Comparison Criteria					
BORING	2790V-20-B01	2790V-20-B02	MACs			TACO		
SAMPLE	2790V-20-B01 (0-3)	2790V-20-B02 (0-3)						
MATRIX	Soil	Soil						
DEPTH (feet)	0-3	0-3						
pH	8.8	8.1						
PID	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (None Detected)								
SVOCs (mg/kg)								
2-Methylnaphthalene	**0.018 J**	**0.028 J**	--	--	--	--	--	--
Acenaphthylene	ND U	**0.005 J**	--	--	--	--	--	--
Anthracene	**0.0078 J**	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.047**	**0.034 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.061**	**0.039**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.097**	**0.066**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.039**	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.04**	**0.016 J**	9	--	--	9	1,700	--
Chrysene	**0.058**	**0.055**	88	--	--	88	17,000	--
Fluoranthene	**0.095**	**0.079**	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.028 J**	**0.023 J**	0.9	1.6	0.9	1.6	170	--
Naphthalene	**0.012 J**	**0.02 J**	1.8	--	--	170	1.8	--
Phenanthrene	**0.048**	**0.05**	--	--	--	--	--	--
Pyrene	**0.082**	**0.068**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Antimony	**0.21 J**	**0.23 J**	5	--	--	31	82	--
Arsenic	**2.1**	**3.4**	11.3	13	--	13	61	--
Barium	**21**	**48**	1,500	--	--	5,500	14,000	--
Beryllium	**0.31**	**0.36**	22	--	--	160	410	--
Boron	**5.2**	ND U	40	--	--	16,000	41,000	--
Cadmium	**0.31**	ND U	5.2	--	--	78	200	--
Calcium	**72,000**	**34,000**	--	--	--	--	--	--
Chromium	**10**	**12**	21	--	--	230	690	--
Cobalt	**3.4**	**4.8**	20	--	--	4,700	12,000	--
Copper	**17**	**17**	2,900	--	--	2,900	8,200	--
Iron	**8,900**	**10,000**	15,000	15,900	--	--	--	--
Lead	**82**	**75**	107	--	--	400	700	--
Magnesium	**33,000**	**19,000**	325,000	--	--	--	730,000	--
Manganese	**180**	**430**	630	636	--	1,600	4,100	--
Mercury	**0.011 J**	**0.082**	0.89	--	--	10	0.1	--
Nickel	**10**	**12**	100	--	--	1,600	4,100	--
Potassium	**630**	**660**	--	--	--	--	--	--
Silver	ND U	**0.12 J**	4.4	--	--	390	1,000	--
Sodium	**300**	**740**	--	--	--	--	--	--
Vanadium	**15**	**18**	550	--	--	550	1,400	--
Zinc	**120**	**50**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.22 J**	**0.51**	--	--	--	--	--	2
Boron	**0.063 J**	**0.064 J**	--	--	--	--	--	2
Cadmium	**0.0031 J**	ND U	--	--	--	--	--	0.005
Lead	ND U	**0.01 L**	--	--	--	--	--	0.0075
Manganese	**0.42 L**	**0.43 L**	--	--	--	--	--	0.15
Zinc	**0.65**	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)								
Lead	NA	**0.45 L**	--	--	--	--	--	0.0075
Manganese	**0.21 L**	**1 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-7
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 5:00:02 PM
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Case Narrative

Client: Ecology and Environment, Inc.
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TestAmerica Job ID: 500-144755-7

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Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-7

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Client Sample ID: 2790V-20-B02 (0-3) — Lab Sample ID: 500-144755-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.020	J	0.037	0.0058	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.028	J	0.076	0.0069	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0050	J	0.037	0.0049	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.050		0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.079		0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.068		0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.034	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.055		0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.066		0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.016	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.039		0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.023	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.23	J	1.2	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.4		0.58	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.58	0.066	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.36		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	3.9	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	34000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.58	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.8		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	17	B	0.58	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	12	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	75		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000		5.8	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	430	B	0.58	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.58	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	660		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	740		58	8.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	50		1.2	0.51	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.010		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.43		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.053	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.45		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.082		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-20-B01 (0-3) — Lab Sample ID: 500-144755-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.012	J	0.035	0.0054	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.018	J	0.070	0.0064	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.048		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0078	J	0.035	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.095		0.035	0.0065	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-20-B01 (0-3) (Continued)

Lab Sample ID: 500-144755-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.082		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.047		0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.058		0.035	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.097		0.035	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.040		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.061		0.035	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.028	J	0.035	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.039		0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.21	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.1		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	21		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.31		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.2	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	72000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	10		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.4		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	17	B	0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	8900	B	10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	82		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	180	B	0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	10		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	630		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	300		52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0031	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.42		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.65	B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-10	2790V-20-B02 (0-3)	Solid	05/02/18 13:55	05/02/18 16:55
500-144755-11	2790V-20-B01 (0-3)	Solid	05/02/18 14:05	05/02/18 16:55

Client Sample ID: 2790V-20-B02 (0-3)
Date Collected: 05/02/18 13:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-10
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Bromomethane	<0.0044	*	0.0044	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*05/02/18 18:15*	*05/11/18 03:40*	*1*
Dibromofluoromethane	*94*		*75 - 126*	*05/02/18 18:15*	*05/11/18 03:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*05/02/18 18:15*	*05/11/18 03:40*	*1*
Toluene-d8 (Surr)	*107*		*75 - 124*	*05/02/18 18:15*	*05/11/18 03:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1

Client Sample ID: 2790V-20-B02 (0-3)
Date Collected: 05/02/18 13:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-10
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
N-Nitrosodi-n-propylamine	<0.076	*	0.076	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Naphthalene	**0.020**	**J**	0.037	0.0058	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2-Methylnaphthalene	**0.028**	**J**	0.076	0.0069	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Acenaphthylene	**0.0050**	**J**	0.037	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Phenanthrene	**0.050**		0.037	0.0052	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Fluoranthene	**0.079**		0.037	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Pyrene	**0.068**		0.037	0.0075	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Benzo[a]anthracene	**0.034**	**J**	0.037	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1

Client Sample ID: 2790V-20-B02 (0-3)
Date Collected: 05/02/18 13:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-10
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.055**		0.037	0.010	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Benzo[b]fluoranthene	**0.066**		0.037	0.0081	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Benzo[k]fluoranthene	**0.016**	**J**	0.037	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Benzo[a]pyrene	**0.039**		0.037	0.0073	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Indeno[1,2,3-cd]pyrene	**0.023**	**J**	0.037	0.0097	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/08/18 06:51	05/10/18 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*116*		*46 - 133*	*05/08/18 06:51*	*05/10/18 03:27*	*1*
Phenol-d5	*124*		*46 - 125*	*05/08/18 06:51*	*05/10/18 03:27*	*1*
Nitrobenzene-d5	*115*		*41 - 120*	*05/08/18 06:51*	*05/10/18 03:27*	*1*
2-Fluorobiphenyl	*112*		*44 - 121*	*05/08/18 06:51*	*05/10/18 03:27*	*1*
2,4,6-Tribromophenol	*94*		*25 - 139*	*05/08/18 06:51*	*05/10/18 03:27*	*1*
Terphenyl-d14	*118*		*35 - 160*	*05/08/18 06:51*	*05/10/18 03:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.23**	**J**	1.2	0.22	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Arsenic	**3.4**		0.58	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Barium	**48**		0.58	0.066	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Beryllium	**0.36**		0.23	0.054	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Boron	**3.9**	**B**	2.9	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Cadmium	**0.30**	**B**	0.12	0.021	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Calcium	**34000**	**B**	12	2.0	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Chromium	**12**		0.58	0.28	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Cobalt	**4.8**		0.29	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Copper	**17**	**B**	0.58	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Iron	**10000**	**B**	12	6.0	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Lead	**75**		0.29	0.13	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Magnesium	**19000**		5.8	2.9	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Manganese	**430**	**B**	0.58	0.083	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Nickel	**12**		0.58	0.17	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Potassium	**660**		29	10	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Silver	**0.12**	**J**	0.29	0.074	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Sodium	**740**		58	8.5	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Vanadium	**18**		0.29	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1
Zinc	**50**		1.2	0.51	mg/Kg	☼	05/05/18 11:23	05/08/18 20:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.51**		0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:39	1
Boron	**0.064**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:39	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Client Sample ID: 2790V-20-B02 (0-3)
Date Collected: 05/02/18 13:55
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-10
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:39	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:39	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:39	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:39	1
Lead	**0.010**		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:39	1
Manganese	**0.43**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:39	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:39	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:39	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:39	1
Zinc	**0.053**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:39	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.45**		0.0075	0.0075	mg/L		05/08/18 16:27	05/10/18 16:30	1
Manganese	**1.0**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:06	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.082**		0.019	0.0063	mg/Kg	☼	05/10/18 16:15	05/11/18 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.1**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Bromomethane	<0.0045	*	0.0045	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Carbon disulfide	<0.0045		0.0045	0.00095	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*75 - 131*	*05/02/18 18:15*	*05/11/18 04:06*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/02/18 18:15*	*05/11/18 04:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*05/02/18 18:15*	*05/11/18 04:06*	*1*
Toluene-d8 (Surr)	*108*		*75 - 124*	*05/02/18 18:15*	*05/11/18 04:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
1,4-Dichlorobenzene	<0.17		0.17	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
N-Nitrosodi-n-propylamine	<0.070	*	0.070	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.036	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachlorobutadiene	<0.17		0.17	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Naphthalene	**0.012**	**J**	0.035	0.0054	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4,5-Trichlorophenol	<0.35		0.35	0.079	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Methylnaphthalene	**0.018**	**J**	0.070	0.0064	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Phenanthrene	**0.048**		0.035	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Anthracene	**0.0078**	**J**	0.035	0.0058	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Fluoranthene	**0.095**		0.035	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Pyrene	**0.082**		0.035	0.0069	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[a]anthracene	**0.047**		0.035	0.0047	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.058**		0.035	0.0095	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.064	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[b]fluoranthene	**0.097**		0.035	0.0075	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[k]fluoranthene	**0.040**		0.035	0.010	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[a]pyrene	**0.061**		0.035	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Indeno[1,2,3-cd]pyrene	**0.028**	**J**	0.035	0.0090	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[g,h,i]perylene	**0.039**		0.035	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*117*		*46 - 133*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
Phenol-d5	*121*		*46 - 125*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
Nitrobenzene-d5	*116*		*41 - 120*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
2-Fluorobiphenyl	*113*		*44 - 121*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
2,4,6-Tribromophenol	*114*		*25 - 139*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
Terphenyl-d14	*124*		*35 - 160*	*05/08/18 06:51*	*05/10/18 07:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.21**	**J**	1.0	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Arsenic	**2.1**		0.52	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Barium	**21**		0.52	0.059	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Beryllium	**0.31**		0.21	0.048	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Boron	**5.2**	**B**	2.6	0.24	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Cadmium	**0.31**	**B**	0.10	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Calcium	**72000**	**B**	100	18	mg/Kg	☼	05/05/18 11:23	05/14/18 11:22	10
Chromium	**10**		0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Cobalt	**3.4**		0.26	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Copper	**17**	**B**	0.52	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Iron	**8900**	**B**	10	5.4	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Lead	**82**		0.26	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Magnesium	**33000**		5.2	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Manganese	**180**	**B**	0.52	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Nickel	**10**		0.52	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Potassium	**630**		26	9.2	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Sodium	**300**		52	7.7	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Vanadium	**15**		0.26	0.061	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Zinc	**120**		1.0	0.46	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.22**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:43	1
Boron	**0.063**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:43	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0031**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:43	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:43	1
Manganese	**0.42**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:43	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Zinc	**0.65**	**B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.21**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.018	0.0060	mg/Kg	☼	05/10/18 16:15	05/11/18 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/09/18 09:39	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755
Chain of Custody Number:
Page 7 of 8
Temperature °C of Cooler: 5.9

Client: E&E
Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Bisher
Lab PM: R Carlstrand

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total Metals	% solids pH						Comments
10		2790V-20-B02(0-3)	5/2/18	1355	2	S	X	X	X	X						
11		2790V-20-B01(0-3)	5/2/18	1405	2	S	X	X	X	X						

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _______ Other
Requested Due Date ___________

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _______ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	E&E	5/2/18	1510	P. Neal	TA	5/2/18	1510
P. Neal	TA	5/2/18	1655	[signature]	TAL-IL	05/02/18	1655

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-7

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7616 S. Grant Highway (ISGS #3696-19)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21765 (Decimal Degrees) Longitude: -88.56507 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21765 Longitude: - 88.56507

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-24-B01 through 2790V-24-B03 were sampled within the construction zone adjacent to ISGS #3696-19 (#2790V-24, Vacant Land). Refer to PSI Report for ISGS #3696-19 (#2790V-24, Vacant Land) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-8.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055893
STATE OF ILLINOIS

P.E or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-19 (Vacant Land)			Comparison Criteria					
BORING	2790V-24-B01	2790V-24-B02	2790V-24-B03	MACs			TACO		
SAMPLE	2790V-24-B01 (0-3)	2790V-24-B02 (0-3)	2790V-24-B03 (0-3)						
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-3	0-3	0-3						
pH	8.3	8.6	8.6						
PID	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)									
2-Butanone (MEK)	ND U	**0.0042 J**	ND U	--	--	--	--	--	--
Acetone	**0.0093 J**	**0.028**	**0.047**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	ND U	**0.011 J**	--	--	--	--	--	--
Acenaphthylene	ND U	ND U	**0.0053 J**	--	--	--	--	--	--
Anthracene	ND U	ND U	**0.0088 J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	**0.014 J**	**0.037**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	**0.39 †**	**0.044**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	**0.024 J**	**0.072**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	**0.026 J**	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	**0.029 J**	9	--	--	9	1,700	--
Chrysene	ND U	**0.018 J**	**0.047**	88	--	--	88	17,000	--
Fluoranthene	ND U	**0.022 J**	**0.076**	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	ND U	**0.021 J**	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	**0.011 J**	1.8	--	--	170	1.8	--
Phenanthrene	ND U	**0.013 J**	**0.033 J**	--	--	--	--	--	--
Pyrene	ND U	**0.022 J**	**0.072**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	ND U	**0.26 J**	**0.24 J**	5	--	--	31	82	--
Arsenic	**3.3**	**4.1**	**3.5**	11.3	13	--	13	61	--
Barium	**59**	**110**	**92**	1,500	--	--	5,500	14,000	--
Beryllium	**0.58**	**0.68**	**0.4**	22	--	--	160	410	--
Boron	**4.6**	**7.9**	**4.9**	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	**0.43**	5.2	--	--	78	200	--
Calcium	**15,000**	**18,000**	**76,000**	--	--	--	--	--	--
Chromium	**14**	**16**	**10**	21	--	--	230	690	--
Cobalt	**7.6**	**8.2**	**5**	20	--	--	4,700	12,000	--
Copper	**13**	**18**	**28**	2,900	--	--	2,900	8,200	--
Iron	**12,000**	**14,000**	**9,200**	15,000	15,900	--	--	--	--
Lead	**12**	**82**	**90**	107	--	--	400	700	--
Magnesium	**9,900**	**9,600**	**35,000**	325,000	--	--	--	730,000	--
Manganese	**330**	**300**	**280**	630	636	--	1,600	4,100	--
Mercury	**0.031**	**0.14**	**0.15**	0.89	--	--	10	0.1	--
Nickel	**15**	**17**	**10**	100	--	--	1,600	4,100	--
Potassium	**1,400**	**1,600**	**960**	--	--	--	--	--	--
Silver	**0.27 J**	**0.26 J**	**0.84**	4.4	--	--	390	1,000	--
Sodium	**190**	**950**	**910**	--	--	--	--	--	--
Vanadium	**24**	**26**	**17**	550	--	--	550	1,400	--
Zinc	**32**	**59**	**120**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	**0.54**	**0.96**	**0.93**	--	--	--	--	--	2
Boron	**0.061 J**	**0.15 J**	**0.081 J**	--	--	--	--	--	2
Cadmium	ND U	**0.0021 J**	**0.0043 J**	--	--	--	--	--	0.005
Cobalt	ND U	**0.014 J**	**0.017 J**	--	--	--	--	--	1
Iron	ND U	**1.5**	**0.39 J**	--	--	--	--	--	5
Lead	ND U	**0.11 L**	**0.053 L**	--	--	--	--	--	0.0075
Manganese	**0.094**	**7.7 L**	**4 L**	--	--	--	--	--	0.15
Mercury	ND U	**0.00084**	ND U	--	--	--	--	--	0.002
Nickel	ND U	**0.016 J**	**0.011 J**	--	--	--	--	--	0.1
Zinc	ND U	ND U	**0.7**	--	--	--	--	--	5
SPLP Metals (mg/L)									
Lead	NA	**0.43 L**	**0.57 L**	--	--	--	--	--	0.0075
Manganese	**0.7 L**	**1.6 L**	**0.62 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-8
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 5:00:38 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Job ID: 500-144755-8

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-8

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: 2790V-24-B01 (0-3) (500-144755-12), (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Client Sample ID: 2790V-24-B01 (0-3) — Lab Sample ID: 500-144755-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0093	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Arsenic	3.3		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	59		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	13	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9900		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.27	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.094		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.30	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.70		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-24-B02 (0-3) — Lab Sample ID: 500-144755-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.028		0.018	0.0076	mg/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	0.0042	J	0.0044	0.0019	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.013	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.022	J	0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.022	J	0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.014	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.024	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.39		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.1		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	110		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.68		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	7.9	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.2		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	18	B	0.59	0.16	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-24-B02 (0-3) (Continued)

Lab Sample ID: 500-144755-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	14000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	82		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9600		5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.26	J	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	950		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	59		1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.96		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	1.5		0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.11		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	7.7		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.016	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.19	J B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.43		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.6		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.00084		0.00020	0.00020	mg/L	1		7470A	TCLP
Mercury	0.14		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-24-B03 (0-3)

Lab Sample ID: 500-144755-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.047		0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.011	J	0.036	0.0056	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.011	J	0.073	0.0067	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0053	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.033	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0088	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.076		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.072		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.037		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.047		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.072		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.029	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.044		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.026	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.24	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.5		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	92		0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	4.9	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.43	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	76000	B	110	19	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Client Sample ID: 2790V-24-B03 (0-3) (Continued)

Lab Sample ID: 500-144755-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	10		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.0		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	28	B	0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	9200	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	90		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	35000		5.5	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	280	B	0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	10		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	960		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Silver	0.84		0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	910		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.93		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.081	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0043	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.39	J	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.053		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	4.0		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.70	B	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.57		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.62		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.15		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-12	2790V-24-B01 (0-3)	Solid	05/02/18 14:15	05/02/18 16:55
500-144755-13	2790V-24-B02 (0-3)	Solid	05/02/18 14:25	05/02/18 16:55
500-144755-14	2790V-24-B03 (0-3)	Solid	05/02/18 14:40	05/02/18 16:55

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0093	J	0.017	0.0076	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/02/18 18:15*	*05/11/18 04:33*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/02/18 18:15*	*05/11/18 04:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 134*	*05/02/18 18:15*	*05/11/18 04:33*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/02/18 18:15*	*05/11/18 04:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
N-Nitrosodi-n-propylamine	<0.079	*	0.079	0.048	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*121*		*46 - 133*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
Phenol-d5	*127*	*X*	*46 - 125*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
Nitrobenzene-d5	*122*	*X*	*41 - 120*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
2-Fluorobiphenyl	*120*		*44 - 121*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
2,4,6-Tribromophenol	*80*		*25 - 139*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
Terphenyl-d14	*127*		*35 - 160*	*05/08/18 06:51*	*05/09/18 04:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Arsenic	**3.3**		0.57	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Barium	**59**		0.57	0.065	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Beryllium	**0.58**		0.23	0.053	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Boron	**4.6**	**B**	2.9	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Cadmium	**0.13**	**B**	0.11	0.021	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Calcium	**15000**	**B**	11	1.9	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Chromium	**14**		0.57	0.28	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Cobalt	**7.6**		0.29	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Copper	**13**	**B**	0.57	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Iron	**12000**	**B**	11	6.0	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Magnesium	**9900**		5.7	2.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Manganese	**330**	**B**	0.57	0.083	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Nickel	**15**		0.57	0.17	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Potassium	**1400**		29	10	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Silver	**0.27**	**J**	0.29	0.074	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Sodium	**190**		57	8.5	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Vanadium	**24**		0.29	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Zinc	**32**		1.1	0.50	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.54**		0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:47	1
Boron	**0.061**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:47	1

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:47	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:47	1
Manganese	**0.094**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:47	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Zinc	**0.30**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.70**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:08	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.017	0.0058	mg/Kg	☼	05/10/18 16:15	05/11/18 13:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.3**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-24-B02 (0-3)

Date Collected: 05/02/18 14:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-13

Matrix: Solid
Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.028**		0.018	0.0076	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Bromomethane	<0.0044	*	0.0044	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
2-Butanone (MEK)	**0.0042**	**J**	0.0044	0.0019	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Chloroethane	<0.0044	*	0.0044	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 05:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*75 - 131*	*05/02/18 18:15*	*05/11/18 05:00*	*1*
Dibromofluoromethane	*98*		*75 - 126*	*05/02/18 18:15*	*05/11/18 05:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*05/02/18 18:15*	*05/11/18 05:00*	*1*
Toluene-d8 (Surr)	*105*		*75 - 124*	*05/02/18 18:15*	*05/11/18 05:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1

Client Sample ID: 2790V-24-B02 (0-3)
Date Collected: 05/02/18 14:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-13
Matrix: Solid
Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
N-Nitrosodi-n-propylamine	<0.079	*	0.079	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Pentachlorophenol	<0.79		0.79	0.62	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Phenanthrene	**0.013**	**J**	0.039	0.0054	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Fluoranthene	**0.022**	**J**	0.039	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Pyrene	**0.022**	**J**	0.039	0.0077	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Benzo[a]anthracene	**0.014**	**J**	0.039	0.0052	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1

Client Sample ID: 2790V-24-B02 (0-3)
Date Collected: 05/02/18 14:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-13
Matrix: Solid
Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.018**	**J**	0.039	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Benzo[b]fluoranthene	**0.024**	**J**	0.039	0.0084	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Benzo[a]pyrene	**0.39**		0.039	0.0075	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/08/18 06:51	05/10/18 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*113*		*46 - 133*	*05/08/18 06:51*	*05/10/18 03:54*	*1*
Phenol-d5	*119*		*46 - 125*	*05/08/18 06:51*	*05/10/18 03:54*	*1*
Nitrobenzene-d5	*106*		*41 - 120*	*05/08/18 06:51*	*05/10/18 03:54*	*1*
2-Fluorobiphenyl	*103*		*44 - 121*	*05/08/18 06:51*	*05/10/18 03:54*	*1*
2,4,6-Tribromophenol	*78*		*25 - 139*	*05/08/18 06:51*	*05/10/18 03:54*	*1*
Terphenyl-d14	*118*		*35 - 160*	*05/08/18 06:51*	*05/10/18 03:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.2	0.23	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Arsenic	**4.1**		0.59	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Barium	**110**		0.59	0.067	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Beryllium	**0.68**		0.24	0.055	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Boron	**7.9**	**B**	2.9	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Cadmium	**0.19**	**B**	0.12	0.021	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Calcium	**18000**	**B**	12	2.0	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Chromium	**16**		0.59	0.29	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Cobalt	**8.2**		0.29	0.077	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Copper	**18**	**B**	0.59	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Iron	**14000**	**B**	12	6.1	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Lead	**82**		0.29	0.14	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Magnesium	**9600**		5.9	2.9	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Manganese	**300**	**B**	0.59	0.085	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Nickel	**17**		0.59	0.17	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Potassium	**1600**		29	10	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Silver	**0.26**	**J**	0.29	0.076	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Sodium	**950**		59	8.7	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Vanadium	**26**		0.29	0.069	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1
Zinc	**59**		1.2	0.52	mg/Kg	☼	05/05/18 11:23	05/08/18 20:40	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.96**		0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:51	1
Boron	**0.15**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:51	1

Client Sample ID: 2790V-24-B02 (0-3)
Date Collected: 05/02/18 14:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-13
Matrix: Solid
Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0021	J	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:51	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:51	1
Cobalt	0.014	J	0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:51	1
Iron	1.5		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:51	1
Lead	0.11		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:51	1
Manganese	7.7		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:51	1
Nickel	0.016	J	0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:51	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:51	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:51	1
Zinc	0.19	J B	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:51	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.43		0.0075	0.0075	mg/L		05/08/18 16:27	05/10/18 16:42	1
Manganese	1.6		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:09	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:09	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00084		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.018	0.0060	mg/Kg	☼	05/10/18 16:15	05/11/18 13:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.20	0.20	SU			05/09/18 09:39	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Client Sample ID: 2790V-24-B03 (0-3)
Date Collected: 05/02/18 14:40
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-14
Matrix: Solid
Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.047		0.017	0.0076	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Benzene	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Bromodichloromethane	<0.0017		0.0017	0.00036	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Carbon tetrachloride	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Chloroform	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Ethylbenzene	<0.0017		0.0017	0.00084	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Vinyl acetate	<0.0044		0.0044	0.0015	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/02/18 18:15	05/16/18 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/02/18 18:15*	*05/16/18 14:19*	*1*
Dibromofluoromethane	*83*		*75 - 126*	*05/02/18 18:15*	*05/16/18 14:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 134*	*05/02/18 18:15*	*05/16/18 14:19*	*1*
Toluene-d8 (Surr)	*92*		*75 - 124*	*05/02/18 18:15*	*05/16/18 14:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1

Client Sample ID: 2790V-24-B03 (0-3)
Date Collected: 05/02/18 14:40
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-14
Matrix: Solid
Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
N-Nitrosodi-n-propylamine	<0.073	*	0.073	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Naphthalene	**0.011**	**J**	0.036	0.0056	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2-Methylnaphthalene	**0.011**	**J**	0.073	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Acenaphthylene	**0.0053**	**J**	0.036	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Phenanthrene	**0.033**	**J**	0.036	0.0051	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Anthracene	**0.0088**	**J**	0.036	0.0061	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Fluoranthene	**0.076**		0.036	0.0068	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Pyrene	**0.072**		0.036	0.0072	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Benzo[a]anthracene	**0.037**		0.036	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1

Client Sample ID: 2790V-24-B03 (0-3)
Date Collected: 05/02/18 14:40
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-14
Matrix: Solid
Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.047**		0.036	0.0099	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Benzo[b]fluoranthene	**0.072**		0.036	0.0079	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Benzo[k]fluoranthene	**0.029**	**J**	0.036	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Benzo[a]pyrene	**0.044**		0.036	0.0071	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Indeno[1,2,3-cd]pyrene	**0.021**	**J**	0.036	0.0094	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
Benzo[g,h,i]perylene	**0.026**	**J**	0.036	0.012	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/08/18 06:51	05/10/18 07:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*119*		*46 - 133*	*05/08/18 06:51*	*05/10/18 07:52*	*1*
Phenol-d5	*120*		*46 - 125*	*05/08/18 06:51*	*05/10/18 07:52*	*1*
Nitrobenzene-d5	*117*		*41 - 120*	*05/08/18 06:51*	*05/10/18 07:52*	*1*
2-Fluorobiphenyl	*112*		*44 - 121*	*05/08/18 06:51*	*05/10/18 07:52*	*1*
2,4,6-Tribromophenol	*108*		*25 - 139*	*05/08/18 06:51*	*05/10/18 07:52*	*1*
Terphenyl-d14	*124*		*35 - 160*	*05/08/18 06:51*	*05/10/18 07:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.24**	**J**	1.1	0.22	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Arsenic	**3.5**		0.55	0.19	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Barium	**92**		0.55	0.063	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Beryllium	**0.40**		0.22	0.052	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Boron	**4.9**	**B**	2.8	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Cadmium	**0.43**	**B**	0.11	0.020	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Calcium	**76000**	**B**	110	19	mg/Kg	☼	05/05/18 11:23	05/09/18 14:38	10
Chromium	**10**		0.55	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Cobalt	**5.0**		0.28	0.073	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Copper	**28**	**B**	0.55	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Iron	**9200**	**B**	11	5.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Lead	**90**		0.28	0.13	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Magnesium	**35000**		5.5	2.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Manganese	**280**	**B**	0.55	0.080	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Nickel	**10**		0.55	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Potassium	**960**		28	9.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Selenium	<0.55		0.55	0.33	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Silver	**0.84**		0.28	0.072	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Sodium	**910**		55	8.2	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Thallium	<0.55		0.55	0.28	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Vanadium	**17**		0.28	0.065	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1
Zinc	**120**		1.1	0.49	mg/Kg	☼	05/05/18 11:23	05/08/18 20:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.93**		0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:55	1
Boron	**0.081**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:55	1

Client Sample ID: 2790V-24-B03 (0-3)
Date Collected: 05/02/18 14:40
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-14
Matrix: Solid
Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0043**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:55	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:55	1
Cobalt	**0.017**	**J**	0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:55	1
Iron	**0.39**	**J**	0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:55	1
Lead	**0.053**		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:55	1
Manganese	**4.0**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:55	1
Nickel	**0.011**	**J**	0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:55	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:55	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:55	1
Zinc	**0.70**	**B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:55	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.57**		0.0075	0.0075	mg/L		05/08/18 16:27	05/10/18 16:45	1
Manganese	**0.62**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:10	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.15**		0.018	0.0059	mg/Kg	☼	05/10/18 16:15	05/11/18 13:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.6**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

Bill To (optional)
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755
Chain of Custody Number:
Page 8 of 8
Temperature °C of Cooler: 5.9

Client: EEE
Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: G Fisher
Lab PM: R Wright

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total Metals	% solids pH						Comments
12		2790V-24-B01(0-3)	5/2/18	1415	2	S	X	X	X	X						
13		2790V-24-B02(0-3)	|	1425	2	S	X	X	X	X						
14		2790V-24-B03(0-3)	|	1440	2	S	X	X	X	X						

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days ____ Other
Requested Due Date ____

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	EEE	5/2/18	1510	P. Neal	TA	5/2/18	1510
P. Neal	TA	5/2/18	1655	[signature]	TAUNE	05/02/18	1655

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

TAL-4124-500 (1208) 5/17/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-8

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7700 block of S. Grant Highway (ISGS #3696-20)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21739 (Decimal Degrees) Longitude: -88.56491 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21739 Longitude: - 88.56491

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-20-B01, 2790V-22-B02, 2790V-24-B01, and 2790V-25-B04 were sampled within the construction zone adjacent to ISGS #3696-20 (#2790V-23) ROW. Refer to PSI Report for ISGS #3696-20 (#2790V-23) ROW including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144755-7, J144756-3, J144755-8, and J145183-1.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

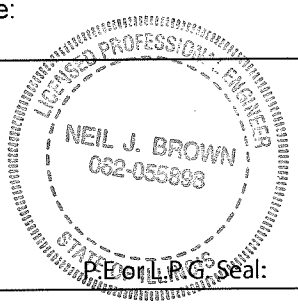
Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:



P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC	=	Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
MSA	=	Metropolitan Statistical Area
TACO	=	Tiered Approach to Corrective Action Objectives
TCLP	=	Toxicity Characteristic Leaching Procedure.
GCGIER	=	Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER	=	Soil Component of the Groundwater Ingestion Exposure Route
SPLP	=	Synthetic Precipitation Leaching Procedure.
ND	=	Not detected.
NA	=	Not analyzed or not applicable.
J	=	Estimated value.
U	=	Analyte was analyzed for but not detected.
PID	=	Photoionization detector.
--	=	No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

#	=	pH is less than 6.25 or greater than 9.0 standard units.
**	=	Headspace reading above background (outside of instrument margin of error).
†	=	Concentration exceeds the most stringent MAC.
m	=	Concentration exceeds the MAC for an MSA.
*	=	Concentration exceeds the MAC for Chicago corporate limits.
c	=	Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r	=	Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L	=	The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1	=	Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2	=	Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
	=	Headspace reading exceeds background levels
	=	Concentration exceeds the most stringent MAC, but is below the MSA MAC.
	=	Concentration exceeds the Chicago MAC, but is below the MSA MAC.
	=	Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-20 (ROW)				Comparison Criteria					
BORING	2790V-20-B01	2790V-22-B02	2790V-24-B01	2790V-25-B04	MACs			TACO		
SAMPLE	2790V-20-B01 (0-3)	2790V-22-B02 (0-5)	2790V-24-B01 (0-3)	2790V-25-B04 (0-5)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-3	0-5	0-3	0-5						
pH	8.8	8.9	8.3	8.6						
PID	--	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)										
Acetone	ND U	ND U	**0.0093 J**	ND U	25	--	--	70,000	100,000	--
SVOCs (mg/kg)										
2-Methylnaphthalene	**0.018 J**	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthylene	ND U	**0.032 J**	ND U	ND U	--	--	--	--	--	--
Anthracene	**0.0078 J**	**0.013 J**	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.047**	**0.14**	ND U	**0.0065 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.061**	**0.16** †	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.097**	**0.2**	ND U	**0.0091 J**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.039**	**0.12**	ND U	ND UJ	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.04**	**0.072**	ND U	ND UJ	9	--	--	9	1,700	--
Chrysene	**0.058**	**0.16**	ND U	ND UJ	88	--	--	88	17,000	--
Fluoranthene	**0.095**	**0.028 J**	ND U	ND U	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.028 J**	**0.089**	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Naphthalene	**0.012 J**	**0.091**	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	**0.048**	**0.031 J**	ND U	ND U	--	--	--	--	--	--
Pyrene	**0.082**	**0.13**	ND U	ND UJ	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	**0.21 J**	ND U	ND U	ND UJ	5	--	--	31	82	--
Arsenic	**2.1**	**2.7**	**3.3**	**3.3 J**	11.3	13	--	13	61	--
Barium	**21**	**44**	**59**	**58**	1,500	--	--	5,500	14,000	--
Beryllium	**0.31**	**0.52**	**0.58**	**0.54**	22	--	--	160	410	--
Boron	**5.2**	**7.8**	**4.6**	**6.8 J**	40	--	--	16,000	41,000	--
Cadmium	**0.31**	ND U	ND U	**32,000 J**						
Calcium	**72,000**	**56,000**	**15,000**	**14**	--	--	--	--	--	--
Chromium	**10**	**13**	**14**	**7.2**	21	--	--	230	690	--
Cobalt	**3.4**	**6**	**7.6**	**15**	20	--	--	4,700	12,000	--
Copper	**17**	**17**	**13**	**13,000**	2,900	--	--	2,900	8,200	--
Iron	**8,900**	**11,000**	**12,000**	**33 J**	15,000	15,900	--	--	--	--
Lead	**82**	**29**	**12**	**18,000 J**	107	--	--	400	700	--
Magnesium	**33,000**	**24,000**	**9,900**	**270 J**	325,000	--	--	--	730,000	--
Manganese	**180**	**220**	**330**	**0.021**	630	636	--	1,600	4,100	--
Mercury	**0.011 J**	**0.024**	**0.031**	**17**	0.89	--	--	10	0.1	--
Nickel	**10**	**16**	**15**	**1,500 J**	100	--	--	1,600	4,100	--
Potassium	**630**	**1,300**	**1,400**	**0.26 J**	--	--	--	--	--	--
Silver	ND U	**0.25 J**	**0.27 J**	**990**	4.4	--	--	390	1,000	--
Sodium	**300**	**800**	**190**	**0.39 J**	--	--	--	--	--	--
Vanadium	**15**	**20**	**24**	**22**	550	--	--	550	1,400	--
Zinc	**120**	**46**	**32**	**46 J**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	**0.22 J**	**0.47 J**	**0.54**	**0.61**	--	--	--	--	--	2
Boron	**0.063 J**	**0.067 J**	**0.061 J**	**0.069 J**	--	--	--	--	--	2
Cadmium	**0.0031 J**	ND U	ND U	**0.0023 J**	--	--	--	--	--	0.005
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Manganese	**0.42 L**	**0.11**	**0.094**	**0.21 L**	--	--	--	--	--	0.15
Selenium	ND U	ND U	ND U	**0.02 J**	--	--	--	--	--	0.15
Zinc	**0.65**	**0.041 J**	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	**0.21 L**	NA	**0.7 L**	**1.1 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-7
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 5:00:02 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Job ID: 500-144755-7

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-7

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Client Sample ID: 2790V-20-B01 (0-3)

Lab Sample ID: 500-144755-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.012	J	0.035	0.0054	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.018	J	0.070	0.0064	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.048		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0078	J	0.035	0.0058	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.095		0.035	0.0065	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-20-B01 (0-3) (Continued)

Lab Sample ID: 500-144755-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.082		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.047		0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.058		0.035	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.097		0.035	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.040		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.061		0.035	0.0067	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.028	J	0.035	0.0090	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.039		0.035	0.011	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.21	J	1.0	0.20	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.1		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	21		0.52	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.31		0.21	0.048	mg/Kg	1	☼	6010B	Total/NA
Boron	5.2	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.31	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	72000	B	100	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	10		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.4		0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Copper	17	B	0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	8900	B	10	5.4	mg/Kg	1	☼	6010B	Total/NA
Lead	82		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	33000		5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	180	B	0.52	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	10		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	630		26	9.2	mg/Kg	1	☼	6010B	Total/NA
Sodium	300		52	7.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.26	0.061	mg/Kg	1	☼	6010B	Total/NA
Zinc	120		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.063	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0031	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.42		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.65	B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.011	J	0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-11	2790V-20-B01 (0-3)	Solid	05/02/18 14:05	05/02/18 16:55

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Bromomethane	<0.0045	*	0.0045	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Carbon disulfide	<0.0045		0.0045	0.00095	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chloroethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*75 - 131*	*05/02/18 18:15*	*05/11/18 04:06*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/02/18 18:15*	*05/11/18 04:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*05/02/18 18:15*	*05/11/18 04:06*	*1*
Toluene-d8 (Surr)	*108*		*75 - 124*	*05/02/18 18:15*	*05/11/18 04:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.077	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
1,3-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
1,4-Dichlorobenzene	<0.17		0.17	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.17		0.17	0.042	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
N-Nitrosodi-n-propylamine	<0.070	*	0.070	0.043	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.036	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachlorobutadiene	<0.17		0.17	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Naphthalene	**0.012**	**J**	0.035	0.0054	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4,5-Trichlorophenol	<0.35		0.35	0.079	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Methylnaphthalene	**0.018**	**J**	0.070	0.0064	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2-Nitrophenol	<0.35		0.35	0.082	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.046	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Phenanthrene	**0.048**		0.035	0.0048	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Anthracene	**0.0078**	**J**	0.035	0.0058	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Fluoranthene	**0.095**		0.035	0.0065	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Pyrene	**0.082**		0.035	0.0069	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[a]anthracene	**0.047**		0.035	0.0047	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.058**		0.035	0.0095	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.064	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[b]fluoranthene	**0.097**		0.035	0.0075	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[k]fluoranthene	**0.040**		0.035	0.010	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[a]pyrene	**0.061**		0.035	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Indeno[1,2,3-cd]pyrene	**0.028**	**J**	0.035	0.0090	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
Benzo[g,h,i]perylene	**0.039**		0.035	0.011	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	05/08/18 06:51	05/10/18 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*117*		*46 - 133*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
Phenol-d5	*121*		*46 - 125*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
Nitrobenzene-d5	*116*		*41 - 120*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
2-Fluorobiphenyl	*113*		*44 - 121*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
2,4,6-Tribromophenol	*114*		*25 - 139*	*05/08/18 06:51*	*05/10/18 07:26*	*1*
Terphenyl-d14	*124*		*35 - 160*	*05/08/18 06:51*	*05/10/18 07:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.21**	**J**	1.0	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Arsenic	**2.1**		0.52	0.18	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Barium	**21**		0.52	0.059	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Beryllium	**0.31**		0.21	0.048	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Boron	**5.2**	**B**	2.6	0.24	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Cadmium	**0.31**	**B**	0.10	0.019	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Calcium	**72000**	**B**	100	18	mg/Kg	☼	05/05/18 11:23	05/14/18 11:22	10
Chromium	**10**		0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Cobalt	**3.4**		0.26	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Copper	**17**	**B**	0.52	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Iron	**8900**	**B**	10	5.4	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Lead	**82**		0.26	0.12	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Magnesium	**33000**		5.2	2.6	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Manganese	**180**	**B**	0.52	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Nickel	**10**		0.52	0.15	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Potassium	**630**		26	9.2	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Silver	<0.26		0.26	0.067	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Sodium	**300**		52	7.7	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Vanadium	**15**		0.26	0.061	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1
Zinc	**120**		1.0	0.46	mg/Kg	☼	05/05/18 11:23	05/08/18 20:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.22**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:43	1
Boron	**0.063**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:43	1

Client Sample ID: 2790V-20-B01 (0-3)
Date Collected: 05/02/18 14:05
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-11
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0031**	**J**	0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:43	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:43	1
Manganese	**0.42**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:43	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:43	1
Zinc	**0.65**	**B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.21**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:07	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:08	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.018	0.0060	mg/Kg	☼	05/10/18 16:15	05/11/18 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/09/18 09:39	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-7

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

(optional)	(optional)
Report To Contact: D Tietzart	Bill To Contact:
Company:	Company:
Address:	Address:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail:	PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755
Chain of Custody Number:
Page 7 of 8
Temperature °C of Cooler: 5.9

Client: EPE	Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)	
Project Location/State: McHenry Co, IL	Lab Project #:
Sampler: E Bosler	Lab PM: R Curtright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total Metals	% Solids pH						Comments
10		2790V-20-B02(0-3)	5/2/18	1355	2	S	X	X	X	X						
11		2790V-20-B01(0-3)	5/2/18	1405	2	S	X	X	X	X						

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _______ Other
Requested Due Date ________

Sample Disposal
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ______ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	EPE	5/2/18	1510	P. Neal	TA	5/2/18	1510
P. Neal	TA	5/2/18	1655	[signature]	TAL-ME	05/02/18	1655

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-7

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144755-8
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 5:00:38 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Job ID: 500-144755-8

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144755-8

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 59.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 431653 recovered outside control limits for the following analytes: Chloroethane and B romomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one acid surrogate and/or one base surrogate outside acceptance limits: 2790V-24-B01 (0-3) (500-144755-12), (LCS 500-431097/2-A) and (MB 500-431097/1-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 3 analytes to recover outside criteria for this method when utilizing this list of analytes. The LCS associated with batch 500-431097 had 1 analyte outside control limits: N-Nitrosodi-n-propylamine. These results have been reported and qualified. (LCS 500-431097/2-A)

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Client Sample ID: 2790V-24-B01 (0-3)

Lab Sample ID: 500-144755-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0093	J	0.017	0.0076	mg/Kg	1	☼	8260B	Total/NA
Arsenic	3.3		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	59		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.58		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.13	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	15000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.6		0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	13	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	9900		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	330	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.27	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	190		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	24		0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	32		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.061	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.094		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.30	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.70		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144755-12	2790V-24-B01 (0-3)	Solid	05/02/18 14:15	05/02/18 16:55

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0093	J	0.017	0.0076	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Bromomethane	<0.0043	*	0.0043	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chloroethane	<0.0043	*	0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*75 - 131*	*05/02/18 18:15*	*05/11/18 04:33*	*1*
Dibromofluoromethane	*105*		*75 - 126*	*05/02/18 18:15*	*05/11/18 04:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 134*	*05/02/18 18:15*	*05/11/18 04:33*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/02/18 18:15*	*05/11/18 04:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
N-Nitrosodi-n-propylamine	<0.079	*	0.079	0.048	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/08/18 06:51	05/09/18 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*121*		*46 - 133*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
Phenol-d5	*127*	*X*	*46 - 125*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
Nitrobenzene-d5	*122*	*X*	*41 - 120*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
2-Fluorobiphenyl	*120*		*44 - 121*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
2,4,6-Tribromophenol	*80*		*25 - 139*	*05/08/18 06:51*	*05/09/18 04:09*	*1*
Terphenyl-d14	*127*		*35 - 160*	*05/08/18 06:51*	*05/09/18 04:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Arsenic	**3.3**		0.57	0.20	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Barium	**59**		0.57	0.065	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Beryllium	**0.58**		0.23	0.053	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Boron	**4.6**	**B**	2.9	0.27	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Cadmium	**0.13**	**B**	0.11	0.021	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Calcium	**15000**	**B**	11	1.9	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Chromium	**14**		0.57	0.28	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Cobalt	**7.6**		0.29	0.075	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Copper	**13**	**B**	0.57	0.16	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Iron	**12000**	**B**	11	6.0	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Lead	**12**		0.29	0.13	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Magnesium	**9900**		5.7	2.8	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Manganese	**330**	**B**	0.57	0.083	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Nickel	**15**		0.57	0.17	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Potassium	**1400**		29	10	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Selenium	<0.57		0.57	0.34	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Silver	**0.27**	**J**	0.29	0.074	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Sodium	**190**		57	8.5	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Vanadium	**24**		0.29	0.068	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1
Zinc	**32**		1.1	0.50	mg/Kg	☼	05/05/18 11:23	05/08/18 20:36	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.54**		0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:47	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/08/18 15:30	05/09/18 17:47	1
Boron	**0.061**	**J**	0.50	0.050	mg/L		05/08/18 15:30	05/09/18 17:47	1

Client Sample ID: 2790V-24-B01 (0-3)
Date Collected: 05/02/18 14:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144755-12
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/08/18 15:30	05/09/18 17:47	1
Chromium	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Cobalt	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Iron	<0.40		0.40	0.20	mg/L		05/08/18 15:30	05/09/18 17:47	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/08/18 15:30	05/09/18 17:47	1
Manganese	**0.094**		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Nickel	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Selenium	<0.050		0.050	0.020	mg/L		05/08/18 15:30	05/09/18 17:47	1
Silver	<0.025		0.025	0.010	mg/L		05/08/18 15:30	05/09/18 17:47	1
Zinc	**0.30**	**J B**	0.50	0.020	mg/L		05/08/18 15:30	05/09/18 17:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.70**		0.025	0.010	mg/L		05/08/18 16:27	05/10/18 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/08/18 15:30	05/09/18 12:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/08/18 15:30	05/09/18 12:08	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/18 13:43	05/09/18 16:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.017	0.0058	mg/Kg	☼	05/10/18 16:15	05/11/18 13:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.3**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144755-8

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

Bill To (optional)
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144755

Chain of Custody Number:

Page 8 of 8

Temperature °C of Cooler: 5.9

Client: EEE
Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: G Fisher
Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TCLP/SPLP Total Metals	% solids pH						Comments
12		2790V-24-B01(0-3)	5/2/18	1415	2	S	X	X	X	X						
13		2790V-24-B02(0-3)	|	1425	2	S	X	X	X	X						
14		2790V-24-B03(0-3)	|	1440	2	S	X	X	X	X						

Turnaround Time Required (Business Days)
__ 1 Day __ 2 Days __ 5 Days __ 7 Days X 10 Days __ 15 Days ____ Other
Requested Due Date ____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	EEE	5/2/18	1510	P. Neal	TA	5/2/18	1510
R Neal	TA	5/2/18	1655	[signature]	TAUNE	05/02/18	1655

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

TAL-4124-500 (1209)

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144755-8

Login Number: 144755
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144756-3
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 10:46:51 AM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Job ID: 500-144756-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144756-3

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one base and / or acid surrogate outside acceptance limits: 2790V-22-B03 (0-5) (500-144756-10), 2790V-22-B02 (0-5) (500-144756-12), 2790V-22-B01 (0-5) (500-144756-13) and (500-144756-E-1-I MSD). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

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

Metals
Method(s) 6010B: The laboratory control sample (LCS) for preparation batch 500-431186 and 500-431350 and analytical batch 500-431536 recovered outside control limits for the following analyte: Iron. The analyte were biased high in the LCS and were not detected in the associated samples 2790V-22-B03 (0-5)D (500-144756-11), 2790V-22-B02 (0-5) (500-144756-12) and 2790V-22-B01 (0-5) (500-144756-13) ; therefore, the data have been reported.

Method(s) 6010B: The method blank for preparation batch 500-431186 and 500-431350 contained Iron above the reporting limit (RL). The sample 2790V-22-B03 (0-5) (500-144756-10) associated with this method blank did not contain the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of sample was not performed.

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Client Sample ID: 2790V-22-B02 (0-5) — Lab Sample ID: 500-144756-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.032	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.031	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.013	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.089		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.13		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.14		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.16		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.20		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.072		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.091		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.028	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.7		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Client Sample ID: 2790V-22-B02 (0-5) (Continued)

Lab Sample ID: 500-144756-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	7.8		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	13		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	29		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	220	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Silver	0.25	J	0.27	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	800	B	53	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.47	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.067	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.041	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-22-B01 (0-5) (Continued)

Lab Sample ID: 500-144756-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	1.4	F1	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.85		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.078		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144756-12	2790V-22-B02 (0-5)	Solid	05/02/18 10:30	05/02/18 16:55

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/02/18 18:15*	*05/12/18 00:10*	*1*
Dibromofluoromethane	*86*		*75 - 126*	*05/02/18 18:15*	*05/12/18 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 134*	*05/02/18 18:15*	*05/12/18 00:10*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/02/18 18:15*	*05/12/18 00:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Naphthalene	<0.036		0.036	0.0057	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Acenaphthylene	**0.032**	**J**	0.036	0.0048	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Phenanthrene	**0.031**	**J**	0.036	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Anthracene	**0.013**	**J**	0.036	0.0061	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Fluoranthene	**0.089**		0.036	0.0068	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Pyrene	**0.13**		0.036	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[a]anthracene	**0.14**		0.036	0.0049	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.16**		0.036	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[b]fluoranthene	**0.20**		0.036	0.0079	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[k]fluoranthene	**0.072**		0.036	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[a]pyrene	**0.16**		0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Indeno[1,2,3-cd]pyrene	**0.091**		0.036	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Dibenz(a,h)anthracene	**0.028**	**J**	0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[g,h,i]perylene	**0.12**		0.036	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*122*		*46 - 133*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
Phenol-d5	*132*	*X*	*46 - 125*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
Nitrobenzene-d5	*123*	*X*	*41 - 120*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
2-Fluorobiphenyl	*116*		*44 - 121*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
2,4,6-Tribromophenol	*99*		*25 - 139*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
Terphenyl-d14	*123*		*35 - 160*	*05/09/18 07:02*	*05/10/18 01:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Arsenic	**2.7**		0.53	0.18	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Barium	**44**		0.53	0.060	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Beryllium	**0.52**		0.21	0.050	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Boron	**7.8**		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Calcium	**56000**	**B**	110	18	mg/Kg	☼	05/05/18 11:25	05/09/18 20:54	10
Chromium	**13**		0.53	0.26	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Cobalt	**6.0**		0.27	0.069	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Copper	**17**		0.53	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Iron	**11000**	**B**	11	5.5	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Lead	**29**		0.27	0.12	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Magnesium	**24000**	**B**	5.3	2.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Manganese	**220**	**B**	0.53	0.077	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Nickel	**16**		0.53	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Potassium	**1300**		27	9.4	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Silver	**0.25**	**J**	0.27	0.068	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Sodium	**800**	**B**	53	7.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Vanadium	**20**		0.27	0.063	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Zinc	**46**	**B**	1.1	0.47	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.47**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:34	1
Boron	**0.067**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:34	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:34	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Iron	<0.40	*	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:34	1
Manganese	**0.11**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:34	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Zinc	**0.041**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.018	0.0060	mg/Kg	☼	05/10/18 16:15	05/11/18 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.9**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144756

Chain of Custody Number:

Page 3 of 3

Temperature °C of Cooler: 3/3

Client	Client Project #
ESE	1009341.0041.02
Project Name	
BEAP 525 (US 20)	
Project Location/State	**Lab Project #**
McHenry, IL	
Sampler	**Lab PM**
E Fisher	R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TCLP/SPLP Total Metals	% solids pH						Comments
10		2790V-22-B03(0-5)	5/2/18	1020	2	S		X	X	X	X						
11		2790V-22-B03(0-5)D		1020	2	S		X	X	X	X						
12		2790V-22-B02(0-5)		1030	2	S		X	X	X	X						
13		2790V-22-B01(0-5)		1045	2	S		X	X	X	X						

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Company	Date	Time		Company	Date	Time
Relinquished By	ESE	5/2/18	1510	Received By	TA	5/2/18	1510
Relinquished By	TA	5/2/18	1655	Received By	TAMI	05/02/18	1655
Relinquished By				Received By			

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

TAL-4124-500 (1209)

5/17/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144756-3

Login Number: 144756
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-145183-1
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Authorized for release by:
5/23/2018 4:18:38 PM

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

Table of Contents

Job ID: 500-145183-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-145183-1

Receipt
The samples were received on 5/9/2018 5:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.8º C and 5.3º C.

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

GC/MS Semi VOA
Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-145183-E-1-J MS) and (500-145183-E-1-K MSD)

Method(s) 8270D: Surrogate recovery for the following samples was outside the upper control limit: 2790V-25-B04 (0-5) (500-145183-1), 2790V-25-B05 (0-5) (500-145183-2) and 2790V-25-B06 (0-5) (500-145183-3). The samples did not contain any target analytes detected above the reporting limit (RL); therefore, re-extraction and re-analysis was not performed.

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

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-145183-1

Client Sample ID: 2790V-25-B04 (0-5)

Lab Sample ID: 500-145183-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.0065	J F1	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0091	J F1	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.3	F1	0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	6.8	B F1	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	32000	B	59	10	mg/Kg	5	☼	6010B	Total/NA
Chromium	14		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.2		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	33	F2	0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500	F1	29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.26	J	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	990		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.39	J F1	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	F1	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.069	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.020	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.069	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-145183-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-145183-1	2790V-25-B04 (0-5)	Solid	05/09/18 09:15	05/09/18 17:30

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/09/18 18:01*	*05/16/18 21:21*	*1*
Dibromofluoromethane	*85*		*75 - 126*	*05/09/18 18:01*	*05/16/18 21:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 134*	*05/09/18 18:01*	*05/16/18 21:21*	*1*
Toluene-d8 (Surr)	*92*		*75 - 124*	*05/09/18 18:01*	*05/16/18 21:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	F1	0.20	0.086	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachloroethane	<0.20	F1	0.20	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Chlorophenol	<0.20	F1	0.20	0.066	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Nitrobenzene	<0.039	F1	0.039	0.0097	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Bis(2-chloroethoxy)methane	<0.20	F1	0.20	0.040	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
1,2,4-Trichlorobenzene	<0.20	F1	0.20	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dimethylphenol	<0.39	F1	0.39	0.15	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Naphthalene	<0.039	F1	0.039	0.0060	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dichlorophenol	<0.39	F1	0.39	0.092	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4,5-Trichlorophenol	<0.39	F1	0.39	0.089	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachlorocyclopentadiene	<0.78	F1	0.78	0.22	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Methylnaphthalene	<0.078	F1	0.078	0.0071	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Chloronaphthalene	<0.20	F1	0.20	0.043	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Chloro-3-methylphenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Dimethyl phthalate	<0.20	F1	0.20	0.051	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dinitrophenol	<0.78	F1	0.78	0.68	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Acenaphthylene	<0.039	F1	0.039	0.0051	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Acenaphthene	<0.039	F1	0.039	0.0070	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Dibenzofuran	<0.20	F1	0.20	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Fluorene	<0.039	F1	0.039	0.0055	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Bromophenyl phenyl ether	<0.20	F1	0.20	0.051	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachlorobenzene	<0.078	F1	0.078	0.0090	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Diethyl phthalate	<0.20	F1	0.20	0.066	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Chlorophenyl phenyl ether	<0.20	F1	0.20	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
N-Nitrosodiphenylamine	<0.20	F1	0.20	0.046	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4,6-Dinitro-2-methylphenol	<0.78	F1	0.78	0.31	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Phenanthrene	<0.039	F1	0.039	0.0054	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Anthracene	<0.039	F1	0.039	0.0065	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Di-n-butyl phthalate	<0.20	F1	0.20	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Fluoranthene	<0.039	F1	0.039	0.0072	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Pyrene	<0.039	F1	0.039	0.0077	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.074	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[a]anthracene	**0.0065**	**J F1**	0.039	0.0052	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039	F1	0.039	0.011	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.071	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[b]fluoranthene	**0.0091**	**J F1**	0.039	0.0084	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[k]fluoranthene	<0.039	F1	0.039	0.011	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[a]pyrene	<0.039	F1	0.039	0.0075	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
3 & 4 Methylphenol	<0.20	F1	0.20	0.065	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*133*		*46 - 133*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
Phenol-d5	*125*		*46 - 125*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
Nitrobenzene-d5	*119*		*41 - 120*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
2-Fluorobiphenyl	*131*	*X*	*44 - 121*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
2,4,6-Tribromophenol	*110*		*25 - 139*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
Terphenyl-d14	*159*		*35 - 160*	*05/16/18 07:21*	*05/17/18 19:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2	F1	1.2	0.23	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Arsenic	**3.3**	**F1**	0.59	0.20	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Barium	**58**		0.59	0.067	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Beryllium	**0.54**		0.24	0.055	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Boron	**6.8**	**B F1**	2.9	0.27	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Cadmium	**0.20**	**B**	0.12	0.021	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Calcium	**32000**	**B**	59	10	mg/Kg	☼	05/11/18 17:01	05/16/18 03:36	5
Chromium	**14**		0.59	0.29	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Cobalt	**7.2**		0.29	0.077	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Copper	**15**		0.59	0.16	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Iron	**13000**		12	6.1	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Lead	**33**	**F2**	0.29	0.14	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Magnesium	**18000**	**B**	5.9	2.9	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Manganese	**270**		0.59	0.085	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Nickel	**17**		0.59	0.17	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Potassium	**1500**	**F1**	29	10	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Selenium	<0.59	F1	0.59	0.35	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Silver	**0.26**	**J**	0.29	0.076	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Sodium	**990**		59	8.7	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Thallium	**0.39**	**J F1**	0.59	0.29	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Vanadium	**22**		0.29	0.070	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Zinc	**46**	**F1**	1.2	0.52	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.61**		0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/15/18 15:36	05/16/18 15:07	1
Boron	**0.069**	**J**	0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:07	1

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0023**	**J**	0.0050	0.0020	mg/L		05/15/18 15:36	05/16/18 15:07	1
Chromium	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Cobalt	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Iron	<0.40		0.40	0.20	mg/L		05/15/18 15:36	05/16/18 15:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/15/18 15:36	05/16/18 15:07	1
Manganese	**0.21**		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Nickel	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Selenium	**0.020**	**J**	0.050	0.020	mg/L		05/15/18 15:36	05/16/18 15:07	1
Silver	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Zinc	**0.069**	**J B**	0.50	0.020	mg/L		05/15/18 15:36	05/16/18 15:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.1**		0.025	0.010	mg/L		05/15/18 15:28	05/16/18 20:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/15/18 15:36	05/21/18 11:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/15/18 15:36	05/21/18 11:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/16/18 13:15	05/17/18 18:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.018	0.0061	mg/Kg	☼	05/17/18 10:56	05/18/18 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.6**		0.20	0.20	SU			05/15/18 16:23	1

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-145183-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

500-145183 COC

Chain of Custody Record

Lab Job #: 500- 145183
Chain of Custody Number:
Page ____ of ____
Temperature °C of Cooler: (4.8)(5.3)

Client: E+E
Client Project #: 1009341.0041.02
Project Name: 176-001-WO41A
Project Location/State: Marengo, IL
Lab Project #:
Sampler: MF, JH
Lab PM: D. Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOC	SVOC	Total/TCLP Metals	pH	Percent Solids					Comments
1		2790V-25-B04(0-5)	5/9/18	0915	5	S		X	X	X	X	X					
2		2790V-25-B05(0-5)	5/9/18	0930	5	S		X	X	X	X	X					
3		2790V-25-B06(0-5)	5/9/18	0940	5	S		X	X	X	X	X					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ✓ 10 Days ___ 15 Days _____ Other
Requested Due Date: _____

Sample Disposal
[ ] Return to Client [✓] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
J. Wright	E+E	5/9/18	1530	B. Neal	TA	5/9/18	1530
B. Neal	TA	5/9/18	1730		TA	05/09/18	1730

Lab Courier ✓
Shipped
Hand Delivered

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

Client Comments

Lab Comments:

TAL-4124-500 (1209)

5/23/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-145183-1

Login Number: 145183
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(4.8)(5.3)c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7701 S. Grant Highway (ISGS #3696-21)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21714 (Decimal Degrees) Longitude: -88.56479 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21714 Longitude: - 88.56479

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-22-B01 through 2790V-22-B03 were sampled within the construction zone adjacent to ISGS #3696-21 (#2790V-22) Grizzy's Pumpkins Coral Farm. Refer to PSI Report for ISGS #3696-21 (#2790V-22) Grizzy's Pumpkins Coral Farm including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data package J144756-3.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

LICENSED PROFESSIONAL ENGINEER NEIL J. BROWN 062-055899 STATE OF ILLINOIS

P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-21 (Grizzy's Pumpkins Coral Farm)				Comparison Criteria					
BORING	2790V-22-B01	2790V-22-B02	2790V-22-B03		MACs			TACO		
SAMPLE	2790V-22-B01 (0-5)	2790V-22-B02 (0-5)	2790V-22-B03 (0-5)	2790V-22-B03 (0-5)D						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-5	0-5	0-5						
pH	8.8	8.9	8.5	8.3						
PID	--	--	--		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)										
Acetone	ND U	ND U	**0.013 J**	**0.012 J**	25	--	--	70,000	100,000	--
SVOCs (mg/kg)										
Acenaphthylene	ND U	**0.032 J**	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	**0.013 J**	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	**0.14**	**0.0099 J**	**0.03 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	**0.16 †**	**0.017 J**	**0.033 J**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	**0.2**	**0.03 J**	**0.069**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	**0.12**	ND U	**0.021 J**	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	**0.072**	**0.011 J**	**0.025 J**	9	--	--	9	1,700	--
Chrysene	ND U	**0.16**	**0.016 J**	**0.047**	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	**0.028 J**	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	ND U	**0.089**	**0.015 J**	**0.064**	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	**0.091**	**0.01 J**	**0.02 J**	0.9	1.6	0.9	1.6	170	--
Phenanthrene	ND U	**0.031 J**	ND U	ND U	--	--	--	--	--	--
Pyrene	ND U	**0.13**	**0.018 J**	**0.07**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Antimony	ND U	ND U	ND U	**0.28 J**	5	--	--	31	82	--
Arsenic	**3.3**	**2.7**	**3**	**2.6**	11.3	13	--	13	61	--
Barium	**64**	**44**	**52**	**44**	1,500	--	--	5,500	14,000	--
Beryllium	**0.6**	**0.52**	**0.59**	**0.53**	22	--	--	160	410	--
Boron	**5.6**	**7.8**	**5.6**	**7.3**	40	--	--	16,000	41,000	--
Calcium	**26,000**	**56,000**	**18,000 J**	**63,000 J**	--	--	--	--	--	--
Chromium	**15**	**13**	**16**	**14**	21	--	--	230	690	--
Cobalt	**6.4**	**6**	**7.1**	**6.4**	20	--	--	4,700	12,000	--
Copper	**100**	**17**	**14**	**14**	2,900	--	--	2,900	8,200	--
Iron	**13,000**	**11,000**	**13,000**	**12,000**	15,000	15,900	--	--	--	--
Lead	**39**	**29**	**15**	**13**	107	--	--	400	700	--
Magnesium	**12,000**	**24,000**	**12,000 J**	**27,000 J**	325,000	--	--	--	730,000	--
Manganese	**310**	**220**	**250**	**260**	630	636	--	1,600	4,100	--
Mercury	**0.078**	**0.024**	**0.023**	**0.034**	0.89	--	--	10	0.1	--
Nickel	**17**	**16**	**19**	**16**	100	--	--	1,600	4,100	--
Potassium	**1,500**	**1,300**	**1,400**	**1,500**	--	--	--	--	--	--
Silver	**0.27 J**	**0.25 J**	**0.26 J**	**0.22 J**	4.4	--	--	390	1,000	--
Sodium	**770**	**800**	**2,400**	**2,300**	--	--	--	--	--	--
Vanadium	**26**	**20**	**26**	**23**	550	--	--	550	1,400	--
Zinc	**180**	**46**	**38**	**31**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	**0.6**	**0.47 J**	**0.54**	**0.55**	--	--	--	--	--	2
Boron	**0.09 J**	**0.067 J**	**0.072 J**	**0.074 J**	--	--	--	--	--	2
Cadmium	**0.0035 J**	ND U	ND U	ND U	--	--	--	--	--	0.005
Cobalt	ND U	ND U	**0.017 J**	**0.02 J**	--	--	--	--	--	1
Iron	ND U	ND U	**0.33 J**	**0.22 J**	--	--	--	--	--	5
Manganese	**0.37 L**	**0.11**	**4.4 L**	**5.1 L**	--	--	--	--	--	0.15
Nickel	**0.013 J**	ND U	**0.012 J**	ND U	--	--	--	--	--	0.1
Zinc	**1.4 J**	**0.041 J**	**0.027 J**	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Manganese	**0.85 L**	NA	**1.7 L**	**1.7 L**	--	--	--	--	--	0.15

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144756-3
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 10:46:51 AM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Job ID: 500-144756-3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144756-3

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one base and / or acid surrogate outside acceptance limits: 2790V-22-B03 (0-5) (500-144756-10), 2790V-22-B02 (0-5) (500-144756-12), 2790V-22-B01 (0-5) (500-144756-13) and (500-144756-E-1-I MSD). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

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

Metals
Method(s) 6010B: The laboratory control sample (LCS) for preparation batch 500-431186 and 500-431350 and analytical batch 500-431536 recovered outside control limits for the following analyte: Iron. The analyte were biased high in the LCS and were not detected in the associated samples 2790V-22-B03 (0-5)D (500-144756-11), 2790V-22-B02 (0-5) (500-144756-12) and 2790V-22-B01 (0-5) (500-144756-13) ; therefore, the data have been reported.

Method(s) 6010B: The method blank for preparation batch 500-431186 and 500-431350 contained Iron above the reporting limit (RL). The sample 2790V-22-B03 (0-5) (500-144756-10) associated with this method blank did not contain the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of sample was not performed.

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Client Sample ID: 2790V-22-B03 (0-5) — Lab Sample ID: 500-144756-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.013	J	0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
Fluoranthene	0.015	J	0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.018	J	0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0099	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.016	J	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.030	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.011	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.017	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.010	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.0		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	52		0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	5.6		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.18	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	18000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.1		0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	15		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	250	B	0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Silver	0.26	J	0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	2400	B	55	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	38	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.072	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.017	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.33	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	4.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.012	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.027	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.023		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-22-B03 (0-5)D — Lab Sample ID: 500-144756-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.012	J	0.017	0.0075	mg/Kg	1	☼	8260B	Total/NA
Fluoranthene	0.064		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.070		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.030	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.047		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.069		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.025	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.033	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Client Sample ID: 2790V-22-B03 (0-5)D (Continued) — Lab Sample ID: 500-144756-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.020	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.021	J	0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.28	J	1.1	0.22	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.6		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	7.3		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.14	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	63000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	14		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.4		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	27000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	260	B	0.56	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		28	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.22	J	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	2300	B	56	8.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	31	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.074	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.22	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	5.1		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	1.7		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.034		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-22-B02 (0-5) — Lab Sample ID: 500-144756-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.032	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.031	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.013	J	0.036	0.0061	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.089		0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.13		0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.14		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.16		0.036	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.20		0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.072		0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.16		0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.091		0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.028	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.12		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.7		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	44		0.53	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.52		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-22-B02 (0-5) (Continued) — Lab Sample ID: 500-144756-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	7.8		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	56000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	13		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	29		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	220	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Silver	0.25	J	0.27	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	800	B	53	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.47	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.067	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.041	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.024		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	8.9		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-22-B01 (0-5) — Lab Sample ID: 500-144756-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	64		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.60		0.23	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	5.6		2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.28	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	26000	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.4		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	100		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	39		0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	310	B	0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.27	J	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	770	B	59	8.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.29	0.069	mg/Kg	1	☼	6010B	Total/NA
Zinc	180	B	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.60		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.090	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0035	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.37		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-22-B01 (0-5) (Continued)

Lab Sample ID: 500-144756-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	1.4	F1	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.85		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.078		0.020	0.0066	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144756-10	2790V-22-B03 (0-5)	Solid	05/02/18 10:20	05/02/18 16:55
500-144756-11	2790V-22-B03 (0-5)D	Solid	05/02/18 10:20	05/02/18 16:55
500-144756-12	2790V-22-B02 (0-5)	Solid	05/02/18 10:30	05/02/18 16:55
500-144756-13	2790V-22-B01 (0-5)	Solid	05/02/18 10:45	05/02/18 16:55

Client Sample ID: 2790V-22-B03 (0-5)
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-10
Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.013	J	0.017	0.0072	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/02/18 18:15*	*05/11/18 23:18*	*1*
Dibromofluoromethane	*87*		*75 - 126*	*05/02/18 18:15*	*05/11/18 23:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 134*	*05/02/18 18:15*	*05/11/18 23:18*	*1*
Toluene-d8 (Surr)	*90*		*75 - 124*	*05/02/18 18:15*	*05/11/18 23:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1

Client Sample ID: 2790V-22-B03 (0-5)
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-10
Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Fluoranthene	**0.015**	**J**	0.038	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Pyrene	**0.018**	**J**	0.038	0.0076	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Benzo[a]anthracene	**0.0099**	**J**	0.038	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1

Client Sample ID: 2790V-22-B03 (0-5)
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-10
Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.016**	**J**	0.038	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Benzo[b]fluoranthene	**0.030**	**J**	0.038	0.0082	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Benzo[k]fluoranthene	**0.011**	**J**	0.038	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Benzo[a]pyrene	**0.017**	**J**	0.038	0.0074	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Indeno[1,2,3-cd]pyrene	**0.010**	**J**	0.038	0.0099	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/18 07:02	05/10/18 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*123*		*46 - 133*	*05/09/18 07:02*	*05/10/18 00:22*	*1*
Phenol-d5	*133*	*X*	*46 - 125*	*05/09/18 07:02*	*05/10/18 00:22*	*1*
Nitrobenzene-d5	*126*	*X*	*41 - 120*	*05/09/18 07:02*	*05/10/18 00:22*	*1*
2-Fluorobiphenyl	*113*		*44 - 121*	*05/09/18 07:02*	*05/10/18 00:22*	*1*
2,4,6-Tribromophenol	*99*		*25 - 139*	*05/09/18 07:02*	*05/10/18 00:22*	*1*
Terphenyl-d14	*125*		*35 - 160*	*05/09/18 07:02*	*05/10/18 00:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Arsenic	**3.0**		0.55	0.19	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Barium	**52**		0.55	0.062	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Beryllium	**0.59**		0.22	0.051	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Boron	**5.6**		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Cadmium	**0.18**	**B**	0.11	0.020	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Calcium	**18000**	**B**	11	1.9	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Chromium	**16**		0.55	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Cobalt	**7.1**		0.27	0.072	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Copper	**14**		0.55	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Iron	**13000**	**B**	11	5.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Lead	**15**		0.27	0.13	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Magnesium	**12000**	**B**	5.5	2.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Manganese	**250**	**B**	0.55	0.079	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Nickel	**19**		0.55	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Potassium	**1400**		27	9.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Silver	**0.26**	**J**	0.27	0.071	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Sodium	**2400**	**B**	55	8.1	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Vanadium	**26**		0.27	0.065	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1
Zinc	**38**	**B**	1.1	0.48	mg/Kg	☼	05/05/18 11:25	05/09/18 04:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.54**		0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:18	1
Boron	**0.072**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:18	1

Client Sample ID: 2790V-22-B03 (0-5)
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-10
Matrix: Solid
Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:18	1
Cobalt	**0.017**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:18	1
Iron	**0.33**	**J ***	0.40	0.20	mg/L		05/09/18 09:04	05/10/18 17:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:18	1
Manganese	**4.4**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:18	1
Nickel	**0.012**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:18	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:18	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:18	1
Zinc	**0.027**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.7**		0.025	0.010	mg/L		05/09/18 16:32	05/10/18 19:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:36	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.019	0.0063	mg/Kg	☼	05/10/18 16:15	05/11/18 14:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.5**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-22-B03 (0-5)D
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-11
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.012	J	0.017	0.0075	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*75 - 131*	*05/02/18 18:15*	*05/11/18 23:44*	*1*
Dibromofluoromethane	*86*		*75 - 126*	*05/02/18 18:15*	*05/11/18 23:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 134*	*05/02/18 18:15*	*05/11/18 23:44*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/02/18 18:15*	*05/11/18 23:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1

Client Sample ID: 2790V-22-B03 (0-5)D
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-11
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Fluoranthene	**0.064**		0.036	0.0068	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Pyrene	**0.070**		0.036	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Benzo[a]anthracene	**0.030**	**J**	0.036	0.0049	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1

Client Sample ID: 2790V-22-B03 (0-5)D
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-11
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.047**		0.036	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Benzo[b]fluoranthene	**0.069**		0.036	0.0079	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Benzo[k]fluoranthene	**0.025**	**J**	0.036	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Benzo[a]pyrene	**0.033**	**J**	0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Indeno[1,2,3-cd]pyrene	**0.020**	**J**	0.036	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
Benzo[g,h,i]perylene	**0.021**	**J**	0.036	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*118*		*46 - 133*	*05/09/18 07:02*	*05/10/18 00:48*	*1*
Phenol-d5	*125*		*46 - 125*	*05/09/18 07:02*	*05/10/18 00:48*	*1*
Nitrobenzene-d5	*115*		*41 - 120*	*05/09/18 07:02*	*05/10/18 00:48*	*1*
2-Fluorobiphenyl	*106*		*44 - 121*	*05/09/18 07:02*	*05/10/18 00:48*	*1*
2,4,6-Tribromophenol	*96*		*25 - 139*	*05/09/18 07:02*	*05/10/18 00:48*	*1*
Terphenyl-d14	*114*		*35 - 160*	*05/09/18 07:02*	*05/10/18 00:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.28**	**J**	1.1	0.22	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Arsenic	**2.6**		0.56	0.19	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Barium	**44**		0.56	0.064	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Beryllium	**0.53**		0.23	0.053	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Boron	**7.3**		2.8	0.26	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Cadmium	**0.14**	**B**	0.11	0.020	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Calcium	**63000**	**B**	110	19	mg/Kg	☼	05/05/18 11:25	05/09/18 20:50	10
Chromium	**14**		0.56	0.28	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Cobalt	**6.4**		0.28	0.074	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Copper	**14**		0.56	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Iron	**12000**	**B**	11	5.9	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Lead	**13**		0.28	0.13	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Magnesium	**27000**	**B**	5.6	2.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Manganese	**260**	**B**	0.56	0.082	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Nickel	**16**		0.56	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Potassium	**1500**		28	10	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Silver	**0.22**	**J**	0.28	0.073	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Sodium	**2300**	**B**	56	8.4	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Vanadium	**23**		0.28	0.067	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1
Zinc	**31**	**B**	1.1	0.50	mg/Kg	☼	05/05/18 11:25	05/09/18 04:28	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.55**		0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:30	1
Boron	**0.074**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:30	1

Client Sample ID: 2790V-22-B03 (0-5)D
Date Collected: 05/02/18 10:20
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-11
Matrix: Solid
Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:30	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:30	1
Cobalt	**0.020**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:30	1
Iron	**0.22**	**J ***	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:30	1
Manganese	**5.1**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:30	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:30	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:30	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:30	1
Zinc	<0.50		0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.7**		0.025	0.010	mg/L		05/09/18 16:32	05/10/18 19:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.034**		0.018	0.0061	mg/Kg	☼	05/10/18 16:15	05/11/18 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.3**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	05/02/18 18:15	05/12/18 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*75 - 131*	*05/02/18 18:15*	*05/12/18 00:10*	*1*
Dibromofluoromethane	*86*		*75 - 126*	*05/02/18 18:15*	*05/12/18 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 134*	*05/02/18 18:15*	*05/12/18 00:10*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/02/18 18:15*	*05/12/18 00:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Naphthalene	<0.036		0.036	0.0057	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Acenaphthylene	**0.032**	**J**	0.036	0.0048	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Phenanthrene	**0.031**	**J**	0.036	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Anthracene	**0.013**	**J**	0.036	0.0061	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Fluoranthene	**0.089**		0.036	0.0068	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Pyrene	**0.13**		0.036	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[a]anthracene	**0.14**		0.036	0.0049	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.16**		0.036	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[b]fluoranthene	**0.20**		0.036	0.0079	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[k]fluoranthene	**0.072**		0.036	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[a]pyrene	**0.16**		0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Indeno[1,2,3-cd]pyrene	**0.091**		0.036	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Dibenz(a,h)anthracene	**0.028**	**J**	0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
Benzo[g,h,i]perylene	**0.12**		0.036	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*122*		*46 - 133*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
Phenol-d5	*132*	*X*	*46 - 125*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
Nitrobenzene-d5	*123*	*X*	*41 - 120*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
2-Fluorobiphenyl	*116*		*44 - 121*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
2,4,6-Tribromophenol	*99*		*25 - 139*	*05/09/18 07:02*	*05/10/18 01:15*	*1*
Terphenyl-d14	*123*		*35 - 160*	*05/09/18 07:02*	*05/10/18 01:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Arsenic	**2.7**		0.53	0.18	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Barium	**44**		0.53	0.060	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Beryllium	**0.52**		0.21	0.050	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Boron	**7.8**		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Cadmium	**0.23**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Calcium	**56000**	**B**	110	18	mg/Kg	☼	05/05/18 11:25	05/09/18 20:54	10
Chromium	**13**		0.53	0.26	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Cobalt	**6.0**		0.27	0.069	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Copper	**17**		0.53	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Iron	**11000**	**B**	11	5.5	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Lead	**29**		0.27	0.12	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Magnesium	**24000**	**B**	5.3	2.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Manganese	**220**	**B**	0.53	0.077	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Nickel	**16**		0.53	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Potassium	**1300**		27	9.4	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Silver	**0.25**	**J**	0.27	0.068	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Sodium	**800**	**B**	53	7.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Vanadium	**20**		0.27	0.063	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1
Zinc	**46**	**B**	1.1	0.47	mg/Kg	☼	05/05/18 11:25	05/09/18 04:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.47**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:34	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:34	1
Boron	**0.067**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:34	1

Client Sample ID: 2790V-22-B02 (0-5)
Date Collected: 05/02/18 10:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-12
Matrix: Solid
Percent Solids: 87.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:34	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Iron	<0.40	*	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:34	1
Manganese	**0.11**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:34	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:34	1
Zinc	**0.041**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:37	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.018	0.0060	mg/Kg	☼	05/10/18 16:15	05/11/18 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.9**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-22-B01 (0-5)
Date Collected: 05/02/18 10:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-13
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Benzene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
2-Butanone (MEK)	<0.0046		0.0046	0.0021	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Chlorobenzene	<0.0019		0.0019	0.00068	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Chloroform	<0.0019		0.0019	0.00064	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Chloromethane	<0.0046		0.0046	0.0019	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00056	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,1-Dichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00054	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00082	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,1,1-Trichloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00079	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Vinyl acetate	<0.0046		0.0046	0.0016	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	05/02/18 18:15	05/12/18 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*75 - 131*	*05/02/18 18:15*	*05/12/18 00:36*	*1*
Dibromofluoromethane	*86*		*75 - 126*	*05/02/18 18:15*	*05/12/18 00:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 134*	*05/02/18 18:15*	*05/12/18 00:36*	*1*
Toluene-d8 (Surr)	*92*		*75 - 124*	*05/02/18 18:15*	*05/12/18 00:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1

Client Sample ID: 2790V-22-B01 (0-5)
Date Collected: 05/02/18 10:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-13
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1

Client Sample ID: 2790V-22-B01 (0-5)
Date Collected: 05/02/18 10:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-13
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/18 07:02	05/10/18 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*124*		*46 - 133*	*05/09/18 07:02*	*05/10/18 01:41*	*1*
Phenol-d5	*133*	*X*	*46 - 125*	*05/09/18 07:02*	*05/10/18 01:41*	*1*
Nitrobenzene-d5	*126*	*X*	*41 - 120*	*05/09/18 07:02*	*05/10/18 01:41*	*1*
2-Fluorobiphenyl	*117*		*44 - 121*	*05/09/18 07:02*	*05/10/18 01:41*	*1*
2,4,6-Tribromophenol	*89*		*25 - 139*	*05/09/18 07:02*	*05/10/18 01:41*	*1*
Terphenyl-d14	*122*		*35 - 160*	*05/09/18 07:02*	*05/10/18 01:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Arsenic	**3.3**		0.59	0.20	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Barium	**64**		0.59	0.067	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Beryllium	**0.60**		0.23	0.055	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Boron	**5.6**		2.9	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Cadmium	**0.28**	**B**	0.12	0.021	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Calcium	**26000**	**B**	12	2.0	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Chromium	**15**		0.59	0.29	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Cobalt	**6.4**		0.29	0.077	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Copper	**100**		0.59	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Iron	**13000**	**B**	12	6.1	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Lead	**39**		0.29	0.14	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Magnesium	**12000**	**B**	5.9	2.9	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Manganese	**310**	**B**	0.59	0.085	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Nickel	**17**		0.59	0.17	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Potassium	**1500**		29	10	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Silver	**0.27**	**J**	0.29	0.076	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Sodium	**770**	**B**	59	8.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Thallium	<0.59		0.59	0.29	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Vanadium	**26**		0.29	0.069	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1
Zinc	**180**	**B**	1.2	0.52	mg/Kg	☼	05/05/18 11:25	05/09/18 04:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.60**		0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:38	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:38	1
Boron	**0.090**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:38	1

Client Sample ID: 2790V-22-B01 (0-5)
Date Collected: 05/02/18 10:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-13
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0035**	**J**	0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:38	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:38	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:38	1
Iron	<0.40	F1 *	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:38	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:38	1
Manganese	**0.37**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:38	1
Nickel	**0.013**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:38	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:38	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:38	1
Zinc	**1.4**	**F1**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.85**		0.025	0.010	mg/L		05/11/18 15:23	05/14/18 12:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:38	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.078**		0.020	0.0066	mg/Kg	☼	05/10/18 16:15	05/11/18 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-3

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144756

Chain of Custody Number:

Page 3 of 3

Temperature °C of Cooler: 3/3

Client	Client Project #
ESE	1009341.0041.02
Project Name	
BEAP 525 (US 20)	
Project Location/State	**Lab Project #**
McHenry, IL	
Sampler	**Lab PM**
E Fisher	R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TCLP/SPLP Total Metals	% solids pH						Comments
10		2790V-22-B03(0-5)	5/2/18	1020	2	S		X	X	X	X						
11		2790V-22-B03(0-5)D		1020	2	S		X	X	X	X						
12		2790V-22-B02(0-5)		1030	2	S		X	X	X	X						
13		2790V-22-B01(0-5)		1045	2	S		X	X	X	X						

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Company	Date	Time		Company	Date	Time
Relinquished By	ESE	5/2/18	1510	Received By	TA	5/2/18	1510
Relinquished By	TA	5/2/18	1655	Received By	TAMI	05/02/18	1655
Relinquished By				Received By			

Lab Courier: TA
Shipped:
Hand Delivered:

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

Client Comments

Lab Comments:

TAL-4124-500 (1209)

5/17/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144756-3

Login Number: 144756
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

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

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

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

I. Source Location Information

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

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
7702 S. Grant Highway (ISGS #3696-22)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

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

Latitude: 42.21708 (Decimal Degrees) Longitude: -88.56438 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

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

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

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Project Name: FAP 525 (US Route 20) Latitude: 42.21708 Longitude: - 88.56438

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

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

Locations 2790V-25-B01 through 2790V-25-B06 were sampled within the construction zone adjacent to ISGS #3696-22 (#2790V-25, Grizzy's). Refer to PSI Report for ISGS #3696-22 (#2790V-25, Grizzy's) including Table 4-4, and Figure 4-4.

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

See attached data summary table and associated laboratory data packages J144756-2 and J145183-1.

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

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

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

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

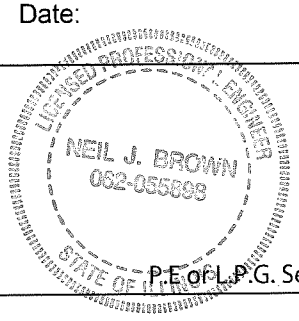
Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:



P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41
CONTAMINANTS OF CONCERN

SITE	ISGS #3696-22 (Grizzy's)						Comparison Criteria					
BORING	2790V-25-B01	2790V-25-B02	2790V-25-B03	2790V-25-B04	2790V-25-B05	2790V-25-B06	MACs			TACO		
SAMPLE	2790V-25-B01 (0-5)	2790V-25-B02 (0-5)	2790V-25-B03 (0-5)	2790V-25-B04 (0-5)	2790V-25-B05 (0-5)	2790V-25-B06 (0-5)						
MATRIX	Soil	Soil	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-5	0-5	0-5	0-5	0-5	0-5						
pH	9	7.9	8.6	8.6	8.7	8.2						
PID	--	--	--	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (mg/kg)												
Acetone	ND U	**0.047**	**0.011 J**	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Toluene	ND U	ND U	**0.0006 J**	ND U	ND U	ND U	12	--	--	650	42	--
Xylenes, Total	ND U	ND U	**0.00057 J**	ND U	ND U	ND U	5.6	--	--	320	5.6	--
SVOCs (mg/kg)												
Acenaphthylene	**0.014 J**	**0.012 J**	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	**0.017 J**	**0.0093 J**	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.11**	**0.035 J**	**0.0069 J**	**0.0065 J**	**0.0058 J**	**0.007 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.12** †	**0.045**	**0.0077 J**	ND U	ND U	ND U	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.16**	**0.063**	**0.011 J**	**0.0091 J**	ND U	**0.013 J**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	**0.04**	ND U	ND UJ	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.061**	**0.02 J**	ND U	ND UJ	ND U	ND U	9	--	--	9	1,700	--
Chrysene	**0.12**	**0.044**	ND U	ND UJ	ND U	ND U	88	--	--	88	17,000	--
Fluoranthene	**0.18**	**0.065**	**0.0082 J**	ND U	**0.0076 J**	**0.0099 J**	3,100	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.044**	**0.03 J**	ND U	ND U	ND U	ND U	0.9	1.6	0.9	1.6	170	--
Phenanthrene	**0.061**	**0.034 J**	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Pyrene	**0.2**	**0.067**	**0.01 J**	ND UJ	ND U	**0.0098 J**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)												
Antimony	**0.26 J**	**0.43 J**	ND U	ND UJ	ND U	ND U	5	--	--	31	82	--
Arsenic	**3.3**	**4.5**	**2.6**	**3.3 J**	**2.7**	**3**	11.3	13	--	13	61	--
Barium	**29**	**47**	**34**	**58**	**48**	**39**	1,500	--	--	5,500	14,000	--
Beryllium	**0.33**	**0.5**	**0.44**	**0.54**	**0.49**	**0.34**	22	--	--	160	410	--
Boron	**4.1**	**4.9**	**7.3**	**6.8 J**	**6.3**	**4.6**	40	--	--	16,000	41,000	--
Calcium	**29,000**	**16,000**	**78,000**	**32,000 J**	**54,000**	**57,000**	--	--	--	--	--	--
Chromium	**10**	**13**	**11**	**14**	**12**	**11**	21	--	--	230	690	--
Cobalt	**5.3**	**5.9**	**5.4**	**7.2**	**6**	**5.2**	20	--	--	4,700	12,000	--
Copper	**14**	**30**	**13**	**15**	**12**	**11**	2,900	--	--	2,900	8,200	--
Iron	**9,900**	**13,000**	**10,000**	**13,000**	**11,000**	**10,000**	15,000	15,900	--	--	--	--
Lead	**42**	**68**	**9.6**	**33 J**	**10**	**42**	107	--	--	400	700	--
Magnesium	**17,000**	**10,000**	**31,000**	**18,000 J**	**24,000**	**30,000**	325,000	--	--	--	730,000	--
Manganese	**260**	**300**	**210**	**270 J**	**280**	**370**	630	636	--	1,600	4,100	--
Mercury	**0.025**	ND U	**0.021**	**0.021**	**0.038**	**0.033**	0.89	--	--	10	0.1	--
Nickel	**13**	**15**	**13**	**17**	**16**	**11**	100	--	--	1,600	4,100	--
Potassium	**790**	**900**	**1,300**	**1,500 J**	**1,400**	**760**	--	--	--	--	--	--
Silver	**0.18 J**	**0.21 J**	**0.18 J**	**0.26 J**	**0.16 J**	**0.17 J**	4.4	--	--	390	1,000	--
Sodium	**970**	**1,500**	**540**	**990**	**350**	**1,700**	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	**0.39 J**	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	**23**	**26**	**20**	**22**	**20**	**23**	550	--	--	550	1,400	--
Zinc	**36**	**76**	**24**	**46 J**	**34**	**53**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)												
Barium	**0.37 J**	**0.56**	**0.49 J**	**0.61**	**0.51**	**0.34 J**	--	--	--	--	--	2
Boron	**0.062 J**	**0.084 J**	**0.064 J**	**0.069 J**	**0.051 J**	**0.065 J**	--	--	--	--	--	2
Cadmium	**0.0023 J**	**0.0047 J**	ND U	**0.0023 J**	**0.0024 J**	**0.003 J**	--	--	--	--	--	0.005
Cobalt	ND U	**0.029**	**0.023 J**	ND U	ND U	ND U	--	--	--	--	--	1
Iron	**0.25 J**	**0.34 J**	**0.28 J**	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	**0.041 L**	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	**0.13**	**8.4 L**	**4.1 L**	**0.21 L**	**0.067**	**0.74 L**	--	--	--	--	--	0.15
Nickel	ND U	**0.02 J**	**0.013 J**	ND U	ND U	ND U	--	--	--	--	--	0.1
Selenium	ND U	ND U	ND U	**0.02 J**	ND U	ND U	--	--	--	--	--	0.05
Zinc	**0.051 J**	**0.19 J**	**0.029 J**	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)												
Lead	NA	**0.43 L**	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	**2.4 L**	**1 L**	**1.1 L**	NA	**0.67 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-144756-2
Client Project/Site: IDOT - 176-001-WO041

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

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 10:45:53 AM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Table of Contents

Job ID: 500-144756-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144756-2

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for 431653 recovered outside control limits for the following analytes:Bromomethane and Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. 2790V-25-B01 (0-5) (500-144756-7) and 2790V-25-B02 (0-5) (500-144756-8)

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one base and / or acid surrogate outside acceptance limits: 2790V-25-B02 (0-5) (500-144756-8), 2790V-25-B03 (0-5) (500-144756-9) and (500-144756-E-1-I MSD). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

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

Metals
Method(s) 6010B: The laboratory control sample (LCS) for preparation batch 500-431186 and 500-431350 and analytical batch 500-431536 recovered outside control limits for the following analyte: Iron. The analyte were biased high in the LCS and were not detected in the associated samples 2790V-25-B01 (0-5) (500-144756-7), 2790V-25-B02 (0-5) (500-144756-8), 2790V-25-B03 (0-5) (500-144756-9) and (500-144756-E-13-E) ; therefore, the data have been reported.

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

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

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

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-2

Client Sample ID: 2790V-25-B01 (0-5) — Lab Sample ID: 500-144756-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.014	J	0.035	0.0047	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.061		0.035	0.0049	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.017	J	0.035	0.0059	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.18		0.035	0.0066	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.20		0.035	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.11		0.035	0.0048	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.12		0.035	0.0097	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.16		0.035	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.061		0.035	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.12		0.035	0.0069	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.044		0.035	0.0092	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.26	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.3		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	29		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.33		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.1		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.21	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	29000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	10		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	14		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	9900	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	260	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	790		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.18	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	970	B	54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	36	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.37	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.062	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.25	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.13		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.051	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.025		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA
pH	9.0		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-25-B02 (0-5) — Lab Sample ID: 500-144756-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.047		0.016	0.0069	mg/Kg	1	☼	8260B	Total/NA
Acenaphthylene	0.012	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.034	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.0093	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.065		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.067		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.035	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-25-B02 (0-5) (Continued)

Lab Sample ID: 500-144756-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	0.044		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.063		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.020	J	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.045		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.030	J	0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.040		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.43	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.5		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	47		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	4.9		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.39	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	16000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.9		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	30		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	68		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	10000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	900		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.21	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	1500	B	54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	76	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.56		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.084	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0047	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Cobalt	0.029		0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.34	J *	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.041		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	8.4		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.19	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.43		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	2.4		0.025	0.010	mg/L	1		6010B	SPLP East
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-25-B03 (0-5)

Lab Sample ID: 500-144756-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.011	J	0.015	0.0067	mg/Kg	1	☼	8260B	Total/NA
Toluene	0.00060	J	0.0015	0.00039	mg/Kg	1	☼	8260B	Total/NA
Xylenes, Total	0.00057	J	0.0031	0.00050	mg/Kg	1	☼	8260B	Total/NA
Fluoranthene	0.0082	J	0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.010	J	0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0069	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.011	J	0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.0077	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-25-B03 (0-5) (Continued)

Lab Sample ID: 500-144756-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.6		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.44		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	7.3		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	78000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.4		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	31000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	210	B	0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.18	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	540	B	54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	24	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.49	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cobalt	0.023	J	0.025	0.010	mg/L	1		6010B	TCLP
Iron	0.28	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	4.1		0.025	0.010	mg/L	1		6010B	TCLP
Nickel	0.013	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.029	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144756-7	2790V-25-B01 (0-5)	Solid	05/02/18 09:30	05/02/18 16:55
500-144756-8	2790V-25-B02 (0-5)	Solid	05/02/18 09:45	05/02/18 16:55
500-144756-9	2790V-25-B03 (0-5)	Solid	05/02/18 10:00	05/02/18 16:55

Client Sample ID: 2790V-25-B01 (0-5)
Date Collected: 05/02/18 09:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-7
Matrix: Solid
Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.014		0.014	0.0062	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Bromomethane	<0.0036	*	0.0036	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Carbon disulfide	<0.0036		0.0036	0.00074	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Chloroethane	<0.0036	*	0.0036	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Chloromethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,1-Dichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00042	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,1,1-Trichloroethane	<0.0014		0.0014	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Vinyl acetate	<0.0036		0.0036	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 08:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*05/02/18 18:15*	*05/11/18 08:34*	*1*
Dibromofluoromethane	*93*		*75 - 126*	*05/02/18 18:15*	*05/11/18 08:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 134*	*05/02/18 18:15*	*05/11/18 08:34*	*1*
Toluene-d8 (Surr)	*106*		*75 - 124*	*05/02/18 18:15*	*05/11/18 08:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.079	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1

Client Sample ID: 2790V-25-B01 (0-5)
Date Collected: 05/02/18 09:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-7
Matrix: Solid
Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Acenaphthylene	**0.014**	**J**	0.035	0.0047	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Phenanthrene	**0.061**		0.035	0.0049	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Anthracene	**0.017**	**J**	0.035	0.0059	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Fluoranthene	**0.18**		0.035	0.0066	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Pyrene	**0.20**		0.035	0.0070	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Benzo[a]anthracene	**0.11**		0.035	0.0048	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1

Client Sample ID: 2790V-25-B01 (0-5)
Date Collected: 05/02/18 09:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-7
Matrix: Solid
Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.12**		0.035	0.0097	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Benzo[b]fluoranthene	**0.16**		0.035	0.0076	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Benzo[k]fluoranthene	**0.061**		0.035	0.010	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Benzo[a]pyrene	**0.12**		0.035	0.0069	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Indeno[1,2,3-cd]pyrene	**0.044**		0.035	0.0092	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/09/18 07:02	05/11/18 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*118*		*46 - 133*	*05/09/18 07:02*	*05/11/18 00:14*	*1*
Phenol-d5	*122*		*46 - 125*	*05/09/18 07:02*	*05/11/18 00:14*	*1*
Nitrobenzene-d5	*118*		*41 - 120*	*05/09/18 07:02*	*05/11/18 00:14*	*1*
2-Fluorobiphenyl	*116*		*44 - 121*	*05/09/18 07:02*	*05/11/18 00:14*	*1*
2,4,6-Tribromophenol	*110*		*25 - 139*	*05/09/18 07:02*	*05/11/18 00:14*	*1*
Terphenyl-d14	*124*		*35 - 160*	*05/09/18 07:02*	*05/11/18 00:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.26**	**J**	1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Arsenic	**3.3**		0.54	0.19	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Barium	**29**		0.54	0.062	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Beryllium	**0.33**		0.22	0.051	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Boron	**4.1**		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Cadmium	**0.21**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Calcium	**29000**	**B**	11	1.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Chromium	**10**		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Cobalt	**5.3**		0.27	0.071	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Copper	**14**		0.54	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Iron	**9900**	**B**	11	5.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Lead	**42**		0.27	0.13	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Magnesium	**17000**	**B**	5.4	2.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Manganese	**260**	**B**	0.54	0.078	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Nickel	**13**		0.54	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Potassium	**790**		27	9.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Silver	**0.18**	**J**	0.27	0.070	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Sodium	**970**	**B**	54	8.0	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Vanadium	**23**		0.27	0.064	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1
Zinc	**36**	**B**	1.1	0.48	mg/Kg	☼	05/05/18 11:25	05/09/18 04:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.37**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:06	1
Boron	**0.062**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:06	1

Client Sample ID: 2790V-25-B01 (0-5)
Date Collected: 05/02/18 09:30
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-7
Matrix: Solid
Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0023	J	0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:06	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:06	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:06	1
Iron	0.25	J *	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:06	1
Manganese	0.13		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:06	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:06	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:06	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:06	1
Zinc	0.051	J	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:31	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.017	0.0056	mg/Kg	☼	05/10/18 16:15	05/11/18 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.0		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-25-B02 (0-5)
Date Collected: 05/02/18 09:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-8
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.047**		0.016	0.0069	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Bromomethane	<0.0040	*	0.0040	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Chloroethane	<0.0040	*	0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Vinyl acetate	<0.0040		0.0040	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*05/02/18 18:15*	*05/11/18 09:01*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/02/18 18:15*	*05/11/18 09:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*	*05/02/18 18:15*	*05/11/18 09:01*	*1*
Toluene-d8 (Surr)	*88*		*75 - 124*	*05/02/18 18:15*	*05/11/18 09:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1

Client Sample ID: 2790V-25-B02 (0-5)
Date Collected: 05/02/18 09:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-8
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Acenaphthylene	**0.012**	**J**	0.038	0.0050	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Phenanthrene	**0.034**	**J**	0.038	0.0053	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Anthracene	**0.0093**	**J**	0.038	0.0064	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Fluoranthene	**0.065**		0.038	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Pyrene	**0.067**		0.038	0.0076	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Benzo[a]anthracene	**0.035**	**J**	0.038	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1

Client Sample ID: 2790V-25-B02 (0-5)
Date Collected: 05/02/18 09:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-8
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.044**		0.038	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Benzo[b]fluoranthene	**0.063**		0.038	0.0082	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Benzo[k]fluoranthene	**0.020**	**J**	0.038	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Benzo[a]pyrene	**0.045**		0.038	0.0074	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Indeno[1,2,3-cd]pyrene	**0.030**	**J**	0.038	0.0099	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
Benzo[g,h,i]perylene	**0.040**		0.038	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	05/09/18 07:02	05/10/18 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*120*		*46 - 133*	*05/09/18 07:02*	*05/10/18 02:34*	*1*
Phenol-d5	*128*	*X*	*46 - 125*	*05/09/18 07:02*	*05/10/18 02:34*	*1*
Nitrobenzene-d5	*120*		*41 - 120*	*05/09/18 07:02*	*05/10/18 02:34*	*1*
2-Fluorobiphenyl	*117*		*44 - 121*	*05/09/18 07:02*	*05/10/18 02:34*	*1*
2,4,6-Tribromophenol	*102*		*25 - 139*	*05/09/18 07:02*	*05/10/18 02:34*	*1*
Terphenyl-d14	*121*		*35 - 160*	*05/09/18 07:02*	*05/10/18 02:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.43**	**J**	1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Arsenic	**4.5**		0.54	0.18	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Barium	**47**		0.54	0.062	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Beryllium	**0.50**		0.22	0.050	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Boron	**4.9**		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Cadmium	**0.39**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Calcium	**16000**	**B**	11	1.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Chromium	**13**		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Cobalt	**5.9**		0.27	0.071	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Copper	**30**		0.54	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Iron	**13000**	**B**	11	5.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Lead	**68**		0.27	0.12	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Magnesium	**10000**	**B**	5.4	2.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Manganese	**300**	**B**	0.54	0.078	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Nickel	**15**		0.54	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Potassium	**900**		27	9.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Silver	**0.21**	**J**	0.27	0.070	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Sodium	**1500**	**B**	54	8.0	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Vanadium	**26**		0.27	0.064	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1
Zinc	**76**	**B**	1.1	0.47	mg/Kg	☼	05/05/18 11:25	05/09/18 04:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.56**		0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:10	1
Boron	**0.084**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:10	1

Client Sample ID: 2790V-25-B02 (0-5)
Date Collected: 05/02/18 09:45
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-8
Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0047**	**J**	0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:10	1
Cobalt	**0.029**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:10	1
Iron	**0.34**	**J ***	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:10	1
Lead	**0.041**		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:10	1
Manganese	**8.4**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:10	1
Nickel	**0.020**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:10	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:10	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:10	1
Zinc	**0.19**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:10	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.43**		0.0075	0.0075	mg/L		05/09/18 16:32	05/10/18 19:46	1
Manganese	**2.4**		0.025	0.010	mg/L		05/09/18 16:32	05/10/18 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:32	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.019		0.019	0.0063	mg/Kg	☼	05/10/18 16:15	05/11/18 13:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.9**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-25-B03 (0-5)
Date Collected: 05/02/18 10:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-9
Matrix: Solid
Percent Solids: 88.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.011**	**J**	0.015	0.0067	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00047	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Dibromochloromethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Toluene	**0.00060**	**J**	0.0015	0.00039	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00069	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Vinyl acetate	<0.0039		0.0039	0.0013	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1
Xylenes, Total	**0.00057**	**J**	0.0031	0.00050	mg/Kg	☼	05/02/18 10:00	05/13/18 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*75 - 131*	*05/02/18 10:00*	*05/13/18 12:56*	*1*
Dibromofluoromethane	*84*		*75 - 126*	*05/02/18 10:00*	*05/13/18 12:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 134*	*05/02/18 10:00*	*05/13/18 12:56*	*1*
Toluene-d8 (Surr)	*89*		*75 - 124*	*05/02/18 10:00*	*05/13/18 12:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.081	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1

Client Sample ID: 2790V-25-B03 (0-5)
Date Collected: 05/02/18 10:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-9
Matrix: Solid
Percent Solids: 88.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Fluoranthene	**0.0082**	**J**	0.036	0.0068	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Pyrene	**0.010**	**J**	0.036	0.0073	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Benzo[a]anthracene	**0.0069**	**J**	0.036	0.0049	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1

Client Sample ID: 2790V-25-B03 (0-5)
Date Collected: 05/02/18 10:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-9
Matrix: Solid
Percent Solids: 88.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.036		0.036	0.010	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Benzo[b]fluoranthene	**0.011**	**J**	0.036	0.0079	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Benzo[a]pyrene	**0.0077**	**J**	0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0095	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	05/09/18 07:02	05/09/18 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*124*		*46 - 133*	*05/09/18 07:02*	*05/09/18 23:55*	*1*
Phenol-d5	*134*	*X*	*46 - 125*	*05/09/18 07:02*	*05/09/18 23:55*	*1*
Nitrobenzene-d5	*123*	*X*	*41 - 120*	*05/09/18 07:02*	*05/09/18 23:55*	*1*
2-Fluorobiphenyl	*110*		*44 - 121*	*05/09/18 07:02*	*05/09/18 23:55*	*1*
2,4,6-Tribromophenol	*95*		*25 - 139*	*05/09/18 07:02*	*05/09/18 23:55*	*1*
Terphenyl-d14	*125*		*35 - 160*	*05/09/18 07:02*	*05/09/18 23:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Arsenic	**2.6**		0.54	0.19	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Barium	**34**		0.54	0.062	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Beryllium	**0.44**		0.22	0.051	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Boron	**7.3**		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Cadmium	**0.16**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Calcium	**78000**	**B**	110	18	mg/Kg	☼	05/05/18 11:25	05/09/18 20:46	10
Chromium	**11**		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Cobalt	**5.4**		0.27	0.071	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Copper	**13**		0.54	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Iron	**10000**	**B**	11	5.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Lead	**9.6**		0.27	0.13	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Magnesium	**31000**	**B**	5.4	2.7	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Manganese	**210**	**B**	0.54	0.079	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Nickel	**13**		0.54	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Potassium	**1300**		27	9.6	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Silver	**0.18**	**J**	0.27	0.070	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Sodium	**540**	**B**	54	8.0	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Vanadium	**20**		0.27	0.064	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1
Zinc	**24**	**B**	1.1	0.48	mg/Kg	☼	05/05/18 11:25	05/09/18 04:20	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.49**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:14	1
Boron	**0.064**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:14	1

Client Sample ID: 2790V-25-B03 (0-5)
Date Collected: 05/02/18 10:00
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-9
Matrix: Solid
Percent Solids: 88.1

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:14	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:14	1
Cobalt	**0.023**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:14	1
Iron	**0.28**	**J ***	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:14	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:14	1
Manganese	**4.1**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:14	1
Nickel	**0.013**	**J**	0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:14	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:14	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:14	1
Zinc	**0.029**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:14	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.0**		0.025	0.010	mg/L		05/09/18 16:32	05/10/18 19:50	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.019	0.0062	mg/Kg	☼	05/10/18 16:15	05/11/18 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.6**		0.20	0.20	SU			05/09/18 09:39	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-2

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact: D Tichbourt
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144756
Chain of Custody Number:
Page 2 of 3
Temperature °C of Cooler: 3.3

Client: EBE
Client Project #: 1009341.004102
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs	SVOCs	TAL PSLP Total Metals	% Solids	pH	Comments
7		2790V-25-B01(0-5)	5/2/18	0930	2	S		X	X	X	X		
8		2790V-25-B02(0-5)	"	0945	2	S		X	X	X	X		
9		2790V-25-B03(0-5)	"	1000	2	S		X	X	X	X		

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1		EBE	5/2/18	1510		TA	5/2/18	1510
2		TA	5/2/18	1655		TAALE	05/02/18	1655
3								

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

5/17/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144756-2

Login Number: 144756
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-145183-1
Client Project/Site: IDOT - 176-001-WO041

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

Authorized for release by:
5/23/2018 4:18:38 PM

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Table of Contents

Job ID: 500-145183-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-145183-1

Receipt
The samples were received on 5/9/2018 5:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.8º C and 5.3º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. (500-145183-E-1-J MS) and (500-145183-E-1-K MSD)

Method(s) 8270D: Surrogate recovery for the following samples was outside the upper control limit: 2790V-25-B04 (0-5) (500-145183-1), 2790V-25-B05 (0-5) (500-145183-2) and 2790V-25-B06 (0-5) (500-145183-3). The samples did not contain any target analytes detected above the reporting limit (RL); therefore, re-extraction and re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-145183-1

Client Sample ID: 2790V-25-B04 (0-5) — Lab Sample ID: 500-145183-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.0065	J F1	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.0091	J F1	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.3	F1	0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	58		0.59	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	6.8	B F1	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	32000	B	59	10	mg/Kg	5	☼	6010B	Total/NA
Chromium	14		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.2		0.29	0.077	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.59	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		12	6.1	mg/Kg	1	☼	6010B	Total/NA
Lead	33	F2	0.29	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	270		0.59	0.085	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500	F1	29	10	mg/Kg	1	☼	6010B	Total/NA
Silver	0.26	J	0.29	0.076	mg/Kg	1	☼	6010B	Total/NA
Sodium	990		59	8.7	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.39	J F1	0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.29	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	46	F1	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.61		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.069	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0023	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Selenium	0.020	J	0.050	0.020	mg/L	1		6010B	TCLP
Zinc	0.069	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	1.1		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.021		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-25-B05 (0-5) — Lab Sample ID: 500-145183-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.0076	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0058	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Arsenic	2.7		0.52	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	48		0.52	0.060	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.21	0.049	mg/Kg	1	☼	6010B	Total/NA
Boron	6.3	B	2.6	0.24	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	B	0.10	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	54000	B	52	8.9	mg/Kg	5	☼	6010B	Total/NA
Chromium	12		0.52	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.0		0.26	0.069	mg/Kg	1	☼	6010B	Total/NA
Copper	12		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		10	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	10		0.26	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.2	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	280		0.52	0.076	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-25-B05 (0-5) (Continued) — Lab Sample ID: 500-145183-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	16		0.52	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		26	9.3	mg/Kg	1	☼	6010B	Total/NA
Silver	0.16	J	0.26	0.068	mg/Kg	1	☼	6010B	Total/NA
Sodium	350		52	7.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20		0.26	0.062	mg/Kg	1	☼	6010B	Total/NA
Zinc	34		1.0	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	0.51		0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.051	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0024	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.067		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.18	J B	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.038		0.017	0.0057	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-25-B06 (0-5) — Lab Sample ID: 500-145183-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.0099	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0098	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0070	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.013	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.0		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	39		0.56	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.34		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.25	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	57000	B	56	9.4	mg/Kg	5	☼	6010B	Total/NA
Chromium	11		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	11		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	42		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	30000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	370		0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	760		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Silver	0.17	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	1700		56	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	53		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.065	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0030	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.74		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.21	J B	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.67		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.033		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-145183-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-145183-1	2790V-25-B04 (0-5)	Solid	05/09/18 09:15	05/09/18 17:30
500-145183-2	2790V-25-B05 (0-5)	Solid	05/09/18 09:30	05/09/18 17:30
500-145183-3	2790V-25-B06 (0-5)	Solid	05/09/18 09:40	05/09/18 17:30

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Vinyl acetate	<0.0045		0.0045	0.0016	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*75 - 131*	*05/09/18 18:01*	*05/16/18 21:21*	*1*
Dibromofluoromethane	*85*		*75 - 126*	*05/09/18 18:01*	*05/16/18 21:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 134*	*05/09/18 18:01*	*05/16/18 21:21*	*1*
Toluene-d8 (Surr)	*92*		*75 - 124*	*05/09/18 18:01*	*05/16/18 21:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	F1	0.20	0.086	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachloroethane	<0.20	F1	0.20	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Chlorophenol	<0.20	F1	0.20	0.066	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Nitrobenzene	<0.039	F1	0.039	0.0097	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Bis(2-chloroethoxy)methane	<0.20	F1	0.20	0.040	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
1,2,4-Trichlorobenzene	<0.20	F1	0.20	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dimethylphenol	<0.39	F1	0.39	0.15	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Naphthalene	<0.039	F1	0.039	0.0060	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dichlorophenol	<0.39	F1	0.39	0.092	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4,5-Trichlorophenol	<0.39	F1	0.39	0.089	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachlorocyclopentadiene	<0.78	F1	0.78	0.22	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Methylnaphthalene	<0.078	F1	0.078	0.0071	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Chloronaphthalene	<0.20	F1	0.20	0.043	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Chloro-3-methylphenol	<0.39	F1	0.39	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Dimethyl phthalate	<0.20	F1	0.20	0.051	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dinitrophenol	<0.78	F1	0.78	0.68	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Acenaphthylene	<0.039	F1	0.039	0.0051	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Acenaphthene	<0.039	F1	0.039	0.0070	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Dibenzofuran	<0.20	F1	0.20	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Fluorene	<0.039	F1	0.039	0.0055	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Bromophenyl phenyl ether	<0.20	F1	0.20	0.051	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Hexachlorobenzene	<0.078	F1	0.078	0.0090	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Diethyl phthalate	<0.20	F1	0.20	0.066	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4-Chlorophenyl phenyl ether	<0.20	F1	0.20	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
N-Nitrosodiphenylamine	<0.20	F1	0.20	0.046	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
4,6-Dinitro-2-methylphenol	<0.78	F1	0.78	0.31	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Phenanthrene	<0.039	F1	0.039	0.0054	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Anthracene	<0.039	F1	0.039	0.0065	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Di-n-butyl phthalate	<0.20	F1	0.20	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Fluoranthene	<0.039	F1	0.039	0.0072	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Pyrene	<0.039	F1	0.039	0.0077	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Butyl benzyl phthalate	<0.20	F1	0.20	0.074	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[a]anthracene	**0.0065**	**J F1**	0.039	0.0052	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039	F1	0.039	0.011	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Bis(2-ethylhexyl) phthalate	<0.20	F1	0.20	0.071	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[b]fluoranthene	**0.0091**	**J F1**	0.039	0.0084	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[k]fluoranthene	<0.039	F1	0.039	0.011	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[a]pyrene	<0.039	F1	0.039	0.0075	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1
3 & 4 Methylphenol	<0.20	F1	0.20	0.065	mg/Kg	☼	05/16/18 07:21	05/17/18 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*133*		*46 - 133*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
Phenol-d5	*125*		*46 - 125*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
Nitrobenzene-d5	*119*		*41 - 120*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
2-Fluorobiphenyl	*131*	*X*	*44 - 121*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
2,4,6-Tribromophenol	*110*		*25 - 139*	*05/16/18 07:21*	*05/17/18 19:33*	*1*
Terphenyl-d14	*159*		*35 - 160*	*05/16/18 07:21*	*05/17/18 19:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2	F1	1.2	0.23	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Arsenic	**3.3**	**F1**	0.59	0.20	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Barium	**58**		0.59	0.067	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Beryllium	**0.54**		0.24	0.055	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Boron	**6.8**	**B F1**	2.9	0.27	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Cadmium	**0.20**	**B**	0.12	0.021	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Calcium	**32000**	**B**	59	10	mg/Kg	☼	05/11/18 17:01	05/16/18 03:36	5
Chromium	**14**		0.59	0.29	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Cobalt	**7.2**		0.29	0.077	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Copper	**15**		0.59	0.16	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Iron	**13000**		12	6.1	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Lead	**33**	**F2**	0.29	0.14	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Magnesium	**18000**	**B**	5.9	2.9	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Manganese	**270**		0.59	0.085	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Nickel	**17**		0.59	0.17	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Potassium	**1500**	**F1**	29	10	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Selenium	<0.59	F1	0.59	0.35	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Silver	**0.26**	**J**	0.29	0.076	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Sodium	**990**		59	8.7	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Thallium	**0.39**	**J F1**	0.59	0.29	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Vanadium	**22**		0.29	0.070	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1
Zinc	**46**	**F1**	1.2	0.52	mg/Kg	☼	05/11/18 17:01	05/14/18 17:35	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.61**		0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/15/18 15:36	05/16/18 15:07	1
Boron	**0.069**	**J**	0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:07	1

Client Sample ID: 2790V-25-B04 (0-5)
Date Collected: 05/09/18 09:15
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-1
Matrix: Solid
Percent Solids: 84.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0023**	**J**	0.0050	0.0020	mg/L		05/15/18 15:36	05/16/18 15:07	1
Chromium	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Cobalt	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Iron	<0.40		0.40	0.20	mg/L		05/15/18 15:36	05/16/18 15:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/15/18 15:36	05/16/18 15:07	1
Manganese	**0.21**		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Nickel	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Selenium	**0.020**	**J**	0.050	0.020	mg/L		05/15/18 15:36	05/16/18 15:07	1
Silver	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:07	1
Zinc	**0.069**	**J B**	0.50	0.020	mg/L		05/15/18 15:36	05/16/18 15:07	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.1**		0.025	0.010	mg/L		05/15/18 15:28	05/16/18 20:07	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/15/18 15:36	05/21/18 11:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/15/18 15:36	05/21/18 11:35	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/16/18 13:15	05/17/18 18:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.018	0.0061	mg/Kg	☼	05/17/18 10:56	05/18/18 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.6**		0.20	0.20	SU			05/15/18 16:23	1

Client Sample ID: 2790V-25-B05 (0-5)
Date Collected: 05/09/18 09:30
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-2
Matrix: Solid
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Carbon disulfide	<0.0043		0.0043	0.00088	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Vinyl acetate	<0.0043		0.0043	0.0015	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	05/09/18 18:01	05/16/18 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/09/18 18:01*	*05/16/18 21:47*	*1*
Dibromofluoromethane	*85*		*75 - 126*	*05/09/18 18:01*	*05/16/18 21:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 134*	*05/09/18 18:01*	*05/16/18 21:47*	*1*
Toluene-d8 (Surr)	*93*		*75 - 124*	*05/09/18 18:01*	*05/16/18 21:47*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1

Client Sample ID: 2790V-25-B05 (0-5)
Date Collected: 05/09/18 09:30
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-2
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Phenanthrene	<0.037		0.037	0.0053	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Fluoranthene	**0.0076**	**J**	0.037	0.0070	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Benzo[a]anthracene	**0.0058**	**J**	0.037	0.0051	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1

Client Sample ID: 2790V-25-B05 (0-5)
Date Collected: 05/09/18 09:30
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-2
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/16/18 07:21	05/17/18 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*137*	*X*	*46 - 133*	*05/16/18 07:21*	*05/17/18 17:12*	*1*
Phenol-d5	*131*	*X*	*46 - 125*	*05/16/18 07:21*	*05/17/18 17:12*	*1*
Nitrobenzene-d5	*123*	*X*	*41 - 120*	*05/16/18 07:21*	*05/17/18 17:12*	*1*
2-Fluorobiphenyl	*138*	*X*	*44 - 121*	*05/16/18 07:21*	*05/17/18 17:12*	*1*
2,4,6-Tribromophenol	*116*		*25 - 139*	*05/16/18 07:21*	*05/17/18 17:12*	*1*
Terphenyl-d14	*170*	*X*	*35 - 160*	*05/16/18 07:21*	*05/17/18 17:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Arsenic	**2.7**		0.52	0.18	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Barium	**48**		0.52	0.060	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Beryllium	**0.49**		0.21	0.049	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Boron	**6.3**	**B**	2.6	0.24	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Cadmium	**0.15**	**B**	0.10	0.019	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Calcium	**54000**	**B**	52	8.9	mg/Kg	☼	05/11/18 17:01	05/16/18 04:04	5
Chromium	**12**		0.52	0.26	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Cobalt	**6.0**		0.26	0.069	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Copper	**12**		0.52	0.15	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Iron	**11000**		10	5.5	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Lead	**10**		0.26	0.12	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Magnesium	**24000**	**B**	5.2	2.6	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Manganese	**280**		0.52	0.076	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Nickel	**16**		0.52	0.15	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Potassium	**1400**		26	9.3	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Selenium	<0.52		0.52	0.31	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Silver	**0.16**	**J**	0.26	0.068	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Sodium	**350**		52	7.8	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Vanadium	**20**		0.26	0.062	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1
Zinc	**34**		1.0	0.46	mg/Kg	☼	05/11/18 17:01	05/14/18 17:55	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.51**		0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/15/18 15:36	05/16/18 15:11	1
Boron	**0.051**	**J**	0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:11	1

Client Sample ID: 2790V-25-B05 (0-5)
Date Collected: 05/09/18 09:30
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-2
Matrix: Solid
Percent Solids: 86.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0024**	**J**	0.0050	0.0020	mg/L		05/15/18 15:36	05/16/18 15:11	1
Chromium	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:11	1
Cobalt	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:11	1
Iron	<0.40		0.40	0.20	mg/L		05/15/18 15:36	05/16/18 15:11	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/15/18 15:36	05/16/18 15:11	1
Manganese	**0.067**		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:11	1
Nickel	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:11	1
Selenium	<0.050		0.050	0.020	mg/L		05/15/18 15:36	05/16/18 15:11	1
Silver	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:11	1
Zinc	**0.18**	**J B**	0.50	0.020	mg/L		05/15/18 15:36	05/16/18 15:11	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/15/18 15:36	05/21/18 11:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/15/18 15:36	05/21/18 11:39	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/16/18 13:15	05/17/18 18:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.038**		0.017	0.0057	mg/Kg	☼	05/17/18 10:56	05/18/18 14:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.7**		0.20	0.20	SU			05/15/18 16:25	1

Client Sample ID: 2790V-25-B06 (0-5)
Date Collected: 05/09/18 09:40
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-3
Matrix: Solid
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0085	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	05/09/18 18:01	05/16/18 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*75 - 131*	*05/09/18 18:01*	*05/16/18 22:13*	*1*
Dibromofluoromethane	*84*		*75 - 126*	*05/09/18 18:01*	*05/16/18 22:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 134*	*05/09/18 18:01*	*05/16/18 22:13*	*1*
Toluene-d8 (Surr)	*91*		*75 - 124*	*05/09/18 18:01*	*05/16/18 22:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.083	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1

Client Sample ID: 2790V-25-B06 (0-5)
Date Collected: 05/09/18 09:40
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-3
Matrix: Solid
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Fluoranthene	**0.0099**	**J**	0.037	0.0069	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Pyrene	**0.0098**	**J**	0.037	0.0074	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Benzo[a]anthracene	**0.0070**	**J**	0.037	0.0050	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1

Client Sample ID: 2790V-25-B06 (0-5)
Date Collected: 05/09/18 09:40
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-3
Matrix: Solid
Percent Solids: 83.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Benzo[b]fluoranthene	**0.013**	**J**	0.037	0.0081	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	05/16/18 07:21	05/17/18 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*131*		*46 - 133*	*05/16/18 07:21*	*05/17/18 17:40*	*1*
Phenol-d5	*123*		*46 - 125*	*05/16/18 07:21*	*05/17/18 17:40*	*1*
Nitrobenzene-d5	*114*		*41 - 120*	*05/16/18 07:21*	*05/17/18 17:40*	*1*
2-Fluorobiphenyl	*127*	*X*	*44 - 121*	*05/16/18 07:21*	*05/17/18 17:40*	*1*
2,4,6-Tribromophenol	*110*		*25 - 139*	*05/16/18 07:21*	*05/17/18 17:40*	*1*
Terphenyl-d14	*156*		*35 - 160*	*05/16/18 07:21*	*05/17/18 17:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Arsenic	**3.0**		0.56	0.19	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Barium	**39**		0.56	0.063	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Beryllium	**0.34**		0.22	0.052	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Boron	**4.6**	**B**	2.8	0.26	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Cadmium	**0.25**	**B**	0.11	0.020	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Calcium	**57000**	**B**	56	9.4	mg/Kg	☼	05/11/18 17:01	05/16/18 04:08	5
Chromium	**11**		0.56	0.28	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Cobalt	**5.2**		0.28	0.073	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Copper	**11**		0.56	0.16	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Iron	**10000**		11	5.8	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Lead	**42**		0.28	0.13	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Magnesium	**30000**	**B**	5.6	2.8	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Manganese	**370**		0.56	0.081	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Nickel	**11**		0.56	0.16	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Potassium	**760**		28	9.9	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Silver	**0.17**	**J**	0.28	0.072	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Sodium	**1700**		56	8.2	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Vanadium	**23**		0.28	0.066	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1
Zinc	**53**		1.1	0.49	mg/Kg	☼	05/11/18 17:01	05/14/18 17:59	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.34**	**J**	0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/15/18 15:36	05/16/18 15:15	1
Boron	**0.065**	**J**	0.50	0.050	mg/L		05/15/18 15:36	05/16/18 15:15	1

Client Sample ID: 2790V-25-B06 (0-5)
Date Collected: 05/09/18 09:40
Date Received: 05/09/18 17:30

Lab Sample ID: 500-145183-3
Matrix: Solid
Percent Solids: 83.5

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0030**	**J**	0.0050	0.0020	mg/L		05/15/18 15:36	05/16/18 15:15	1
Chromium	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:15	1
Cobalt	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:15	1
Iron	<0.40		0.40	0.20	mg/L		05/15/18 15:36	05/16/18 15:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/15/18 15:36	05/16/18 15:15	1
Manganese	**0.74**		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:15	1
Nickel	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:15	1
Selenium	<0.050		0.050	0.020	mg/L		05/15/18 15:36	05/16/18 15:15	1
Silver	<0.025		0.025	0.010	mg/L		05/15/18 15:36	05/16/18 15:15	1
Zinc	**0.21**	**J B**	0.50	0.020	mg/L		05/15/18 15:36	05/16/18 15:15	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.67**		0.025	0.010	mg/L		05/15/18 15:28	05/16/18 20:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/15/18 15:36	05/21/18 11:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/15/18 15:36	05/21/18 11:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/16/18 13:15	05/17/18 18:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.033**		0.017	0.0058	mg/Kg	☼	05/17/18 10:56	05/18/18 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.2**		0.20	0.20	SU			05/15/18 16:27	1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-145183-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

500-145183 COC

Chain of Custody Record

Lab Job #: 500- 145183
Chain of Custody Number:
Page ____ of ____
Temperature °C of Cooler: (4.8)(5.3)

Client: E+E
Client Project #: 1009341.0041.02
Project Name: 176-001-WO41A
Project Location/State: Marengo, IL
Lab Project #:
Sampler: MF, JH
Lab PM: D. Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOC	SVOC	Total/TCLP Metals	pH	Percent Solids					Comments
1		2790V-25-B04(0-5)	5/9/18	0915	5	S		X	X	X	X	X					
2		2790V-25-B05(0-5)	5/9/18	0930	5	S		X	X	X	X	X					
3		2790V-25-B06(0-5)	5/9/18	0940	5	S		X	X	X	X	X					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ✓ 10 Days ___ 15 Days _____ Other
Requested Due Date: _____

Sample Disposal
[ ] Return to Client [✓] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
J. Wright	E+E	5/9/18	1530	B. Neal	TA	5/9/18	1530
B. Neal	TA	5/9/18	1730		TA	05/09/18	1730

Lab Courier ✓
Shipped
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

5/23/2018

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-145183-1

Login Number: 145183
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(4.8)(5.3)c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
18700-19000 blocks of E. and W. Coral Road (ISGS #3696-23)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.21647 (Decimal Degrees) Longitude: -88.56402 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): Approximate End Date (mm/dd/yyyy):

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 525 (US Route 20) Latitude: 42.21647 Longitude: - 88.56402

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Locations 2790V-19-B01, 2790V-19-B05, and 2790V-19-B06 were sampled within the construction zone adjacent to ISGS #3696-23 (#2790V-19, Agricultural Land). Refer to PSI Report for ISGS #3696-23 (#2790V-19, Agricultural Land) including Table 4-4, and Figure 4-4.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

See attached data summary table and associated laboratory data package J144756-1.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Neil Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

P.E or L.P.G. Seal:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-065693
STATE OF ILLINOIS

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC = Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg = Milligrams per kilogram.
mg/L = Milligrams per liter.
MSA = Metropolitan Statistical Area
TACO = Tiered Approach to Corrective Action Objectives
TCLP = Toxicity Characteristic Leaching Procedure.
GCGIER = Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER = Soil Component of the Groundwater Ingestion Exposure Route
SPLP = Synthetic Precipitation Leaching Procedure.
ND = Not detected.
NA = Not analyzed or not applicable.
J = Estimated value.
U = Analyte was analyzed for but not detected.
PID = Photoionization detector.
-- = No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

\# = pH is less than 6.25 or greater than 9.0 standard units.
** = Headspace reading above background (outside of instrument margin of error).
† = Concentration exceeds the most stringent MAC.
m = Concentration exceeds the MAC for an MSA.
* = Concentration exceeds the MAC for Chicago corporate limits.
c = Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r = Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L = The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1 = Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2 = Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
= Headspace reading exceeds background levels
= Concentration exceeds the most stringent MAC, but is below the MSA MAC.
= Concentration exceeds the Chicago MAC, but is below the MSA MAC.
= Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

CONTAMINANTS OF CONCERN

SITE	ISGS #3696-23 (Agricultural Land)			Comparison Criteria					
BORING	2790V-19-B01	2790V-19-B05	2790V-19-B06	MACs			TACO		
SAMPLE	2790V-19-B01 (0-4)	2790V-19-B05 (0-4)	2790V-19-B06 (0-4)						
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-4	0-4	0-4						
pH	8.6	8.8	8.7						
PID	--	--	--	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (None Detected)									
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	**0.029 J**	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	**0.013 J**	**0.013 J**	**0.0062 J**	--	--	--	--	--	--
Anthracene	**0.089**	**0.022 J**	**0.0073 J**	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	**0.24**	**0.099 J**	**0.048**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	**0.22 †**	**0.1 †**	**0.061**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	**0.38**	**0.15 J**	**0.09**	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	**0.085**	**0.073**	**0.053**	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.095**	**0.056 J**	**0.03 J**	9	--	--	9	1,700	--
Chrysene	**0.24**	**0.1**	**0.058**	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Fluoranthene	**0.43**	**0.19 J**	**0.085**	3,100	--	--	3,100	82,000	--
Fluorene	**0.028 J**	**0.0069 J**	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	**0.086**	**0.061**	**0.042**	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	**0.29**	**0.1**	**0.035 J**	--	--	--	--	--	--
Pyrene	**0.36**	**0.18**	**0.082**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Antimony	ND U	**0.21 J**	**0.24 J**	5	--	--	31	82	--
Arsenic	**3.6**	**3.5**	**3**	11.3	13	--	13	61	--
Barium	**42**	**34**	**26**	1,500	--	--	5,500	14,000	--
Beryllium	**0.5**	**0.39**	**0.29**	22	--	--	160	410	--
Boron	**7.1**	**5.3 J**	**4.6**	40	--	--	16,000	41,000	--
Calcium	**61,000**	**72,000 J**	**78,000**	--	--	--	--	--	--
Chromium	**16**	**11**	**9.1**	21	--	--	230	690	--
Cobalt	**6.7**	**5.2**	**4.8**	20	--	--	4,700	12,000	--
Copper	**24**	**17**	**16**	2,900	--	--	2,900	8,200	--
Iron	**12,000**	**9,600**	**9,000**	15,000	15,900	--	--	--	--
Lead	**110 †**	**66 J**	**64**	107	--	--	400	700	--
Magnesium	**27,000**	**35,000 J**	**39,000**	325,000	--	--	--	730,000	--
Manganese	**260**	**270**	**300**	630	636	--	1,600	4,100	--
Mercury	**0.032**	**0.032**	**0.019**	0.89	--	--	10	0.1	--
Nickel	**16**	**12**	**11**	100	--	--	1,600	4,100	--
Potassium	**1,300**	**880 J**	**640**	--	--	--	--	--	--
Silver	**0.2 J**	**0.12 J**	**0.11 J**	4.4	--	--	390	1,000	--
Sodium	**380**	**910**	**770**	--	--	--	--	--	--
Vanadium	**22**	**19**	**17**	550	--	--	550	1,400	--
Zinc	**110**	**61 J**	**55**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	**0.41 J**	**0.38 J**	**0.32 J**	--	--	--	--	--	2
Boron	**0.07 J**	**0.086 J**	**0.082 J**	--	--	--	--	--	2
Cadmium	**0.0032 J**	**0.0039 J**	**0.0034 J**	--	--	--	--	--	0.005
Iron	**0.21 J**	**0.25 J**	ND U	--	--	--	--	--	5
Lead	ND U	**0.0082 L**	ND U	--	--	--	--	--	0.0075
Manganese	**0.026**	**0.22 L**	**0.27 L**	--	--	--	--	--	0.15
Zinc	**0.082 J**	**0.075 J**	**0.077 J**	--	--	--	--	--	5
SPLP Metals (mg/L)									
Lead	NA	**0.33 L**	NA	--	--	--	--	--	0.0075
Manganese	NA	**1 L**	**0.84 L**	--	--	--	--	--	0.15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-144756-1
Client Project/Site: IDOT - 176-001-WO041

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
5/17/2018 10:44:57 AM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Table of Contents

Job ID: 500-144756-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-144756-1

Receipt
The samples were received on 5/2/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for 431653 recovered outside control limits for the following analytes:Bromomethane and Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. 2790V-19-B05 (0-4) (500-144756-1), 2790V-19-B06 (0-4) (500-144756-2), 2790V-19-B04 (0-4) (500-144756-3), 2790V-19-B03 (0-4) (500-144756-4), 2790V-19-B02 (0-4) (500-144756-5) and 2790V-19-B01 (0-4) (500-144756-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one base and / or acid surrogate outside acceptance limits: 2790V-19-B05 (0-4) (500-144756-1), 2790V-19-B03 (0-4) (500-144756-4) and (500-144756-E-1-I MSD). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8270D: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes. Data has been qualified and reported. 2790V-19-B05 (0-4) (500-144756-1), (500-144756-E-1-H MS) and (500-144756-E-1-I MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The laboratory control sample (LCS) for preparation batch 500-431186 and 500-431350 and analytical batch 500-431536 recovered outside control limits for the following analyte: Iron. The analyte were biased high in the LCS and were not detected in the associated samples 2790V-19-B05 (0-4) (500-144756-1), 2790V-19-B06 (0-4) (500-144756-2), 2790V-19-B04 (0-4) (500-144756-3), 2790V-19-B03 (0-4) (500-144756-4), 2790V-19-B02 (0-4) (500-144756-5), 2790V-19-B01 (0-4) (500-144756-6) and (500-144756-E-13-E) ; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-1

Client Sample ID: 2790V-19-B05 (0-4) — Lab Sample ID: 500-144756-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.013	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0069	J	0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.022	J F1	0.038	0.0063	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.19	F1	0.038	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.18		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.099	F1	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.10		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.15	F1	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.056	F1	0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.10		0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.061		0.038	0.0098	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.073		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.21	J F1	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.5		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	34		0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.39		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	5.3	F1	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.36	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	72000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	11		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.2		0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	17		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	9600	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	66	F2	0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	35000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	270	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	880	F1	27	9.5	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	910	B	54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	61	B F1	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.086	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0039	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.25	J *	0.40	0.20	mg/L	1		6010B	TCLP
Lead	0.0082		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.22		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.075	J	0.50	0.020	mg/L	1		6010B	TCLP
Lead	0.33		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	1.0		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.032		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2790V-19-B06 (0-4) — Lab Sample ID: 500-144756-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.0062	J	0.036	0.0048	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.035	J	0.036	0.0050	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Client Sample ID: 2790V-19-B06 (0-4) (Continued)

Lab Sample ID: 500-144756-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.0073	J	0.036	0.0060	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.085		0.036	0.0067	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.082		0.036	0.0072	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.048		0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.058		0.036	0.0099	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.090		0.036	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.030	J	0.036	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.061		0.036	0.0070	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.042		0.036	0.0094	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.053		0.036	0.012	mg/Kg	1	☼	8270D	Total/NA
Antimony	0.24	J	1.1	0.21	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.0		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	26		0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.29		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	4.6		2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.33	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	78000	B	110	18	mg/Kg	10	☼	6010B	Total/NA
Chromium	9.1		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	4.8		0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	9000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	64		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	39000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	640		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.11	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	770	B	54	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	55	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.082	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0034	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.27		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.077	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.84		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.019		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA
pH	8.7		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-19-B01 (0-4)

Lab Sample ID: 500-144756-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.013	J	0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.029	J	0.039	0.0071	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.028	J	0.039	0.0056	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.29		0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.089		0.039	0.0066	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.43		0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.36		0.039	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.24		0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.24		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.38		0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.095		0.039	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.22		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.086		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.085		0.039	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2790V-19-B01 (0-4) (Continued)

Lab Sample ID: 500-144756-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	42		0.56	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.50		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	7.1		2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.45	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	61000	B	110	19	mg/Kg	10	☼	6010B	Total/NA
Chromium	16		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.7		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	24		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	110		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	27000	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	260	B	0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	16		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1300		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Silver	0.20	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	380	B	56	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22		0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	110	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.41	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.070	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0032	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Iron	0.21	J *	0.40	0.20	mg/L	1		6010B	TCLP
Manganese	0.026		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.082	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.032		0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA
pH	8.6		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144756-1	2790V-19-B05 (0-4)	Solid	05/02/18 09:15	05/02/18 16:55
500-144756-2	2790V-19-B06 (0-4)	Solid	05/02/18 09:25	05/02/18 16:55
500-144756-6	2790V-19-B01 (0-4)	Solid	05/02/18 11:35	05/02/18 16:55

Client Sample ID: 2790V-19-B05 (0-4)
Date Collected: 05/02/18 09:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-1
Matrix: Solid
Percent Solids: 87.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0065	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Bromomethane	<0.0037	*	0.0037	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
2-Butanone (MEK)	<0.0037		0.0037	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Carbon disulfide	<0.0037		0.0037	0.00077	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Chloroethane	<0.0037	*	0.0037	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Ethylbenzene	<0.0015		0.0015	0.00071	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Trichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Vinyl acetate	<0.0037		0.0037	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/02/18 18:15*	*05/11/18 05:53*	*1*
Dibromofluoromethane	*111*		*75 - 126*	*05/02/18 18:15*	*05/11/18 05:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 134*	*05/02/18 18:15*	*05/11/18 05:53*	*1*
Toluene-d8 (Surr)	*95*		*75 - 124*	*05/02/18 18:15*	*05/11/18 05:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1

Client Sample ID: 2790V-19-B05 (0-4)
Date Collected: 05/02/18 09:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-1
Matrix: Solid
Percent Solids: 87.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2-Chloronaphthalene	<0.19	F1	0.19	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,4-Dinitrophenol	<0.76	F1	0.76	0.67	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Acenaphthylene	**0.013**	**J**	0.038	0.0050	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Fluorene	**0.0069**	**J**	0.038	0.0053	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4-Bromophenyl phenyl ether	<0.19	F1	0.19	0.050	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Diethyl phthalate	<0.19	F1	0.19	0.064	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
N-Nitrosodiphenylamine	<0.19	F1	0.19	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Phenanthrene	**0.10**		0.038	0.0053	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Anthracene	**0.022**	**J F1**	0.038	0.0063	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Di-n-butyl phthalate	<0.19	F1	0.19	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Fluoranthene	**0.19**	**F1**	0.038	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Pyrene	**0.18**		0.038	0.0075	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Butyl benzyl phthalate	<0.19	F1	0.19	0.072	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Benzo[a]anthracene	**0.099**	**F1**	0.038	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1

Client Sample ID: 2790V-19-B05 (0-4)
Date Collected: 05/02/18 09:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-1
Matrix: Solid
Percent Solids: 87.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.10**		0.038	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Bis(2-ethylhexyl) phthalate	<0.19	F1	0.19	0.069	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Benzo[b]fluoranthene	**0.15**	**F1**	0.038	0.0082	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Benzo[k]fluoranthene	**0.056**	**F1**	0.038	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Benzo[a]pyrene	**0.10**		0.038	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Indeno[1,2,3-cd]pyrene	**0.061**		0.038	0.0098	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
Benzo[g,h,i]perylene	**0.073**		0.038	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	05/09/18 07:02	05/10/18 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*115*		*46 - 133*	*05/09/18 07:02*	*05/10/18 22:28*	*1*
Phenol-d5	*128*	*X*	*46 - 125*	*05/09/18 07:02*	*05/10/18 22:28*	*1*
Nitrobenzene-d5	*109*		*41 - 120*	*05/09/18 07:02*	*05/10/18 22:28*	*1*
2-Fluorobiphenyl	*109*		*44 - 121*	*05/09/18 07:02*	*05/10/18 22:28*	*1*
2,4,6-Tribromophenol	*89*		*25 - 139*	*05/09/18 07:02*	*05/10/18 22:28*	*1*
Terphenyl-d14	*120*		*35 - 160*	*05/09/18 07:02*	*05/10/18 22:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.21**	**J F1**	1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Arsenic	**3.5**		0.54	0.18	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Barium	**34**		0.54	0.061	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Beryllium	**0.39**		0.22	0.050	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Boron	**5.3**	**F1**	2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Cadmium	**0.36**	**B**	0.11	0.019	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Calcium	**72000**	**B**	110	18	mg/Kg	☼	05/05/18 11:25	05/09/18 19:58	10
Chromium	**11**		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Cobalt	**5.2**		0.27	0.070	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Copper	**17**		0.54	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Iron	**9600**	**B**	11	5.6	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Lead	**66**	**F2**	0.27	0.12	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Magnesium	**35000**	**B**	5.4	2.7	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Manganese	**270**	**B**	0.54	0.078	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Nickel	**12**		0.54	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Potassium	**880**	**F1**	27	9.5	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Selenium	<0.54	F1 F2	0.54	0.32	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Silver	**0.12**	**J**	0.27	0.069	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Sodium	**910**	**B**	54	8.0	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Thallium	<0.54	F1	0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Vanadium	**19**		0.27	0.063	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1
Zinc	**61**	**B F1**	1.1	0.47	mg/Kg	☼	05/05/18 11:25	05/09/18 03:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.38**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 20:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 20:42	1
Boron	**0.086**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 20:42	1

Client Sample ID: 2790V-19-B05 (0-4)
Date Collected: 05/02/18 09:15
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-1
Matrix: Solid
Percent Solids: 87.0

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0039**	**J**	0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 20:42	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:42	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:42	1
Iron	**0.25**	**J ***	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 20:42	1
Lead	**0.0082**		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 20:42	1
Manganese	**0.22**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:42	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:42	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 20:42	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:42	1
Zinc	**0.075**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 20:42	1

Method: 6010B - SPLP Metals - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.33**		0.0075	0.0075	mg/L		05/09/18 16:32	05/10/18 19:11	1
Manganese	**1.0**		0.025	0.010	mg/L		05/09/18 16:32	05/10/18 19:11	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:26	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.032**		0.018	0.0061	mg/Kg	☼	05/10/18 16:15	05/11/18 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.8**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-19-B06 (0-4)
Date Collected: 05/02/18 09:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-2
Matrix: Solid
Percent Solids: 88.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0069	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Bromomethane	<0.0039	*	0.0039	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
2-Butanone (MEK)	<0.0039		0.0039	0.0018	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Chloroethane	<0.0039	*	0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Chloroform	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Ethylbenzene	<0.0016		0.0016	0.00076	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Methylene Chloride	<0.0039		0.0039	0.0016	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00068	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Vinyl acetate	<0.0039		0.0039	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Vinyl chloride	<0.0016		0.0016	0.00070	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*	*05/02/18 18:15*	*05/11/18 06:19*	*1*
Dibromofluoromethane	*107*		*75 - 126*	*05/02/18 18:15*	*05/11/18 06:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 134*	*05/02/18 18:15*	*05/11/18 06:19*	*1*
Toluene-d8 (Surr)	*103*		*75 - 124*	*05/02/18 18:15*	*05/11/18 06:19*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.080	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1

Client Sample ID: 2790V-19-B06 (0-4)
Date Collected: 05/02/18 09:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-2
Matrix: Solid
Percent Solids: 88.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Acenaphthylene	**0.0062**	**J**	0.036	0.0048	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Phenanthrene	**0.035**	**J**	0.036	0.0050	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Anthracene	**0.0073**	**J**	0.036	0.0060	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Fluoranthene	**0.085**		0.036	0.0067	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Pyrene	**0.082**		0.036	0.0072	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Benzo[a]anthracene	**0.048**		0.036	0.0049	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1

Client Sample ID: 2790V-19-B06 (0-4)
Date Collected: 05/02/18 09:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-2
Matrix: Solid
Percent Solids: 88.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.058		0.036	0.0099	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Benzo[b]fluoranthene	0.090		0.036	0.0078	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Benzo[k]fluoranthene	0.030	J	0.036	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Benzo[a]pyrene	0.061		0.036	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Indeno[1,2,3-cd]pyrene	0.042		0.036	0.0094	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
Benzo[g,h,i]perylene	0.053		0.036	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*117*		*46 - 133*	*05/09/18 07:02*	*05/10/18 02:08*	*1*
Phenol-d5	*125*		*46 - 125*	*05/09/18 07:02*	*05/10/18 02:08*	*1*
Nitrobenzene-d5	*115*		*41 - 120*	*05/09/18 07:02*	*05/10/18 02:08*	*1*
2-Fluorobiphenyl	*115*		*44 - 121*	*05/09/18 07:02*	*05/10/18 02:08*	*1*
2,4,6-Tribromophenol	*92*		*25 - 139*	*05/09/18 07:02*	*05/10/18 02:08*	*1*
Terphenyl-d14	*119*		*35 - 160*	*05/09/18 07:02*	*05/10/18 02:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.24	J	1.1	0.21	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Arsenic	3.0		0.54	0.19	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Barium	26		0.54	0.062	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Beryllium	0.29		0.22	0.051	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Boron	4.6		2.7	0.25	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Cadmium	0.33	B	0.11	0.020	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Calcium	78000	B	110	18	mg/Kg	☼	05/05/18 11:25	05/09/18 20:18	10
Chromium	9.1		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Cobalt	4.8		0.27	0.071	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Copper	16		0.54	0.15	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Iron	9000	B	11	5.7	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Lead	64		0.27	0.13	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Magnesium	39000	B	5.4	2.7	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Manganese	300	B	0.54	0.079	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Nickel	11		0.54	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Potassium	640		27	9.6	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Silver	0.11	J	0.27	0.070	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Sodium	770	B	54	8.1	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Vanadium	17		0.27	0.064	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1
Zinc	55	B	1.1	0.48	mg/Kg	☼	05/05/18 11:25	05/09/18 03:45	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.32	J	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 20:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 20:46	1
Boron	0.082	J	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 20:46	1

Client Sample ID: 2790V-19-B06 (0-4)
Date Collected: 05/02/18 09:25
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-2
Matrix: Solid
Percent Solids: 88.4

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0034**	**J**	0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 20:46	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:46	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:46	1
Iron	<0.40	*	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 20:46	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 20:46	1
Manganese	**0.27**		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:46	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:46	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 20:46	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 20:46	1
Zinc	**0.077**	**J**	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 20:46	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.84**		0.025	0.010	mg/L		05/09/18 16:32	05/10/18 19:15	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:27	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0063	mg/Kg	☼	05/10/18 16:15	05/11/18 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.7**		0.20	0.20	SU			05/09/18 09:39	1

Client Sample ID: 2790V-19-B01 (0-4)
Date Collected: 05/02/18 11:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-6
Matrix: Solid
Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.015		0.015	0.0066	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Bromomethane	<0.0038	*	0.0038	0.0014	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Chloroethane	<0.0038	*	0.0038	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Vinyl acetate	<0.0038		0.0038	0.0013	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	05/02/18 18:15	05/11/18 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*75 - 131*	*05/02/18 18:15*	*05/11/18 08:07*	*1*
Dibromofluoromethane	*104*		*75 - 126*	*05/02/18 18:15*	*05/11/18 08:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 134*	*05/02/18 18:15*	*05/11/18 08:07*	*1*
Toluene-d8 (Surr)	*106*		*75 - 124*	*05/02/18 18:15*	*05/11/18 08:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.088	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1

Client Sample ID: 2790V-19-B01 (0-4)
Date Collected: 05/02/18 11:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-6
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.048	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Acenaphthylene	**0.013**	**J**	0.039	0.0052	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Acenaphthene	**0.029**	**J**	0.039	0.0071	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Fluorene	**0.028**	**J**	0.039	0.0056	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Phenanthrene	**0.29**		0.039	0.0055	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Anthracene	**0.089**		0.039	0.0066	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Carbazole	<0.20		0.20	0.099	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Fluoranthene	**0.43**		0.039	0.0073	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Pyrene	**0.36**		0.039	0.0079	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Benzo[a]anthracene	**0.24**		0.039	0.0053	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1

Client Sample ID: 2790V-19-B01 (0-4)
Date Collected: 05/02/18 11:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-6
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.24**		0.039	0.011	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Benzo[b]fluoranthene	**0.38**		0.039	0.0085	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Benzo[k]fluoranthene	**0.095**		0.039	0.012	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Benzo[a]pyrene	**0.22**		0.039	0.0077	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Indeno[1,2,3-cd]pyrene	**0.086**		0.039	0.010	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
Benzo[g,h,i]perylene	**0.085**		0.039	0.013	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	05/09/18 07:02	05/10/18 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*116*		*46 - 133*	*05/09/18 07:02*	*05/10/18 23:47*	*1*
Phenol-d5	*123*		*46 - 125*	*05/09/18 07:02*	*05/10/18 23:47*	*1*
Nitrobenzene-d5	*118*		*41 - 120*	*05/09/18 07:02*	*05/10/18 23:47*	*1*
2-Fluorobiphenyl	*113*		*44 - 121*	*05/09/18 07:02*	*05/10/18 23:47*	*1*
2,4,6-Tribromophenol	*100*		*25 - 139*	*05/09/18 07:02*	*05/10/18 23:47*	*1*
Terphenyl-d14	*119*		*35 - 160*	*05/09/18 07:02*	*05/10/18 23:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Arsenic	**3.6**		0.56	0.19	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Barium	**42**		0.56	0.063	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Beryllium	**0.50**		0.22	0.052	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Boron	**7.1**		2.8	0.26	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Cadmium	**0.45**	**B**	0.11	0.020	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Calcium	**61000**	**B**	110	19	mg/Kg	☼	05/05/18 11:25	05/09/18 20:42	10
Chromium	**16**		0.56	0.28	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Cobalt	**6.7**		0.28	0.073	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Copper	**24**		0.56	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Iron	**12000**	**B**	11	5.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Lead	**110**		0.28	0.13	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Magnesium	**27000**	**B**	5.6	2.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Manganese	**260**	**B**	0.56	0.081	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Nickel	**16**		0.56	0.16	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Potassium	**1300**		28	9.8	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Silver	**0.20**	**J**	0.28	0.072	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Sodium	**380**	**B**	56	8.2	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Vanadium	**22**		0.28	0.066	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1
Zinc	**110**	**B**	1.1	0.49	mg/Kg	☼	05/05/18 11:25	05/09/18 04:01	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.41**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/09/18 09:04	05/09/18 21:02	1
Boron	**0.070**	**J**	0.50	0.050	mg/L		05/09/18 09:04	05/09/18 21:02	1

Client Sample ID: 2790V-19-B01 (0-4)
Date Collected: 05/02/18 11:35
Date Received: 05/02/18 16:55

Lab Sample ID: 500-144756-6
Matrix: Solid
Percent Solids: 83.8

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0032	J	0.0050	0.0020	mg/L		05/09/18 09:04	05/09/18 21:02	1
Chromium	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:02	1
Cobalt	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:02	1
Iron	0.21	J *	0.40	0.20	mg/L		05/09/18 09:04	05/09/18 21:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/09/18 09:04	05/09/18 21:02	1
Manganese	0.026		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:02	1
Nickel	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:02	1
Selenium	<0.050		0.050	0.020	mg/L		05/09/18 09:04	05/09/18 21:02	1
Silver	<0.025		0.025	0.010	mg/L		05/09/18 09:04	05/09/18 21:02	1
Zinc	0.082	J	0.50	0.020	mg/L		05/09/18 09:04	05/09/18 21:02	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/09/18 09:04	05/09/18 15:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/09/18 09:04	05/09/18 15:30	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/09/18 16:30	05/10/18 09:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.017	0.0058	mg/Kg	☼	05/10/18 16:15	05/11/18 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.6		0.20	0.20	SU			05/09/18 09:39	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
*	LCS or LCSD is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

TestAmerica Job ID: 500-144756-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
9045D		Solid	pH
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact: D Tidwell
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144756
Chain of Custody Number:
Page 1 of 3
Temperature °C of Cooler: 33

Client: EAE
Client Project #: 1009341.0041.02
Project Name: FAP 525 (US 20)
Project Location/State: McHenry Co, IL
Lab Project #:
Sampler: E Fisher
Lab PM: R Wright

Preservative
Parameter

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOCs	SVOCs	TAL/SPLP Total Metals	% SO Lids pH	500-144756 COC	Comments
1		2790V-19-B05(0-4)	5/2/18	0915	2	S	X	X	X	X		
2		2790V-19-B06(0-4)		0925	2	S	X	X	X	X		
3		2790V-19-B04(0-4)		1055	2	S	X	X	X	X		
4		2790V-19-B03(0-4)		1110	2	S	X	X	X	X		
5		2790V-19-B02(0-4)		1120	2	S	X	X	X	X		
6		2790V-19-B01(0-4)		1135	2	S	X	X	X	X		

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days X 10 Days ___ 15 Days _____ Other
Requested Due Date

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Company	Date	Time
Relinquished By	EAE	5/2/18	1510
Relinquished By	TA	5/2/18	1615
Relinquished By			

	Company	Date	Time
Received By	TA	5/2/18	1510
Received By	TA	05/02/18	1655
Received By			

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-144756-1

Login Number: 144756
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 525 (US Route 20) Office Phone Number, if available:

Physical Site Location (address, including number and street):
8100 block of S. Grant Highway (ISGS #3696-24)

City: Coral State: IL Zip Code: 60152

County: McHenry Township: Coral

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 42.21066 (Decimal Degrees) Longitude: -88.55784 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ⊘ Map Interpolation ◯ Photo Interpolation ◯ Survey ◯ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): Approximate End Date (mm/dd/yyyy):

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation
Street Address: 201 West Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 525 (US Route 20) Latitude: 42.21066 Longitude: - 88.55784

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Location 2956V-04-B03 was sampled within the construction zone adjacent to ISGS #3696-24 (#2956V-2 [partial]) Agricultural Land. Refer to PSI Report for ISGS #3696-24 (#2956V-2 [partial]) Agricultural Land including Table 4-4, and Figure 4-3.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

See attached data summary table and associated laboratory data package J145111-3.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Neil Brown (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Ecology and Environment, Inc.

Street Address: 33 West Monroe

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

1/27/2020

Date:

LICENSED PROFESSIONAL ENGINEER
NEIL J. BROWN
062-055898
STATE OF ILLINOIS

P.E. or L.P.G. Seal:

Analytical Data Summary
PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41

Key to Data Tables

MAC	=	Maximum Allowable Concentration of Chemical Constituent in Uncontaminated Soil Used as Fill Material At Regulated Fill Operations
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
MSA	=	Metropolitan Statistical Area
TACO	=	Tiered Approach to Corrective Action Objectives
TCLP	=	Toxicity Characteristic Leaching Procedure.
GCGIER	=	Groundwater Component of the Groundwater Ingestion Exposure Route
SCGIER	=	Soil Component of the Groundwater Ingestion Exposure Route
SPLP	=	Synthetic Precipitation Leaching Procedure.
ND	=	Not detected.
NA	=	Not analyzed or not applicable.
J	=	Estimated value.
U	=	Analyte was analyzed for but not detected.
PID	=	Photoionization detector.
--	=	No PID readings detected above background (within instrument margin of error).

Criteria Qualifiers and Shading

#	=	pH is less than 6.25 or greater than 9.0 standard units.
**	=	Headspace reading above background (outside of instrument margin of error).
†	=	Concentration exceeds the most stringent MAC.
m	=	Concentration exceeds the MAC for an MSA.
*	=	Concentration exceeds the MAC for Chicago corporate limits.
c	=	Concentration exceeds a TACO Tier 1 RO for the Construction Worker Exposure Route.
r	=	Concentration exceeds a TACO Tier 1 soil RO for residential properties.
L	=	The detected TCLP/SPLP concentration exceeds the TACO Tier 1 RO for the SCGIER.
W1	=	Concentration exceeds the Tier 1 Class 1 RO for the GCGIER.
W1,2	=	Concentration exceeds the Tier 1 Class 2 RO for the GCGIER.
	=	Headspace reading exceeds background levels
	=	Concentration exceeds the most stringent MAC, but is below the MSA MAC.
	=	Concentration exceeds the Chicago MAC, but is below the MSA MAC.
	=	Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-003-17; WorkOrder #41
CONTAMINANTS OF CONCERN

SITE	ISGS #3696-24 (Agricultural Land)		Comparison Criteria					
BORING	2956V-04-B03		MACs			TACO		
SAMPLE	2956V-04-B03 (0-4)	2956V-04-B03 (0-4) D						
MATRIX	Soil	Soil						
DEPTH (feet)	0-4	0-4						
pH	7.9	8.3						
PID	--		Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
VOCs (None Detected)								
SVOCs (mg/kg)								
Benzo(a)anthracene	ND U	**0.0082 J**	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	ND U	**0.011 J**	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	ND U	**0.017 J**	0.9	2.1	1.5	2.1	170	--
Chrysene	ND U	**0.013 J**	88	--	--	88	17,000	--
Fluoranthene	ND U	**0.015 J**	3,100	--	--	3,100	82,000	--
Phenanthrene	ND U	**0.0058 J**	--	--	--	--	--	--
Pyrene	ND U	**0.013 J**	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)								
Arsenic	**4.5**	**3.6**	11.3	13	--	13	61	--
Barium	**100**	**85**	1,500	--	--	5,500	14,000	--
Beryllium	**0.81**	**0.65**	22	--	--	160	410	--
Boron	**6.3**	**8.8**	40	--	--	16,000	41,000	--
Calcium	**2,900 J**	**27,000 J**	--	--	--	--	--	--
Chromium	**21**	**17**	21	--	--	230	690	--
Cobalt	**8.3**	**7.1**	20	--	--	4,700	12,000	--
Copper	**15**	**16**	2,900	--	--	2,900	8,200	--
Iron	**18,000 †m**	**15,000**	15,000	15,900	--	--	--	--
Lead	**12**	**17**	107	--	--	400	700	--
Magnesium	**4,100 J**	**18,000 J**	325,000	--	--	--	730,000	--
Manganese	**340**	**340**	630	636	--	1,600	4,100	--
Mercury	**0.032**	**0.019**	0.89	--	--	10	0.1	--
Nickel	**21**	**16**	100	--	--	1,600	4,100	--
Potassium	**1,500**	**1,600**	--	--	--	--	--	--
Selenium	**0.48 J**	**0.38 J**	1.3	--	--	390	1,000	--
Silver	**0.37**	**0.24 J**	4.4	--	--	390	1,000	--
Sodium	**230**	**220**	--	--	--	--	--	--
Vanadium	**34**	**29**	550	--	--	550	1,400	--
Zinc	**62**	**65**	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)								
Barium	**0.46 J**	**0.54**	--	--	--	--	--	2
Boron	**0.059 J**	ND U	--	--	--	--	--	2
Iron	ND U	ND U	--	--	--	--	--	5
Manganese	**0.21 L**	**0.02 J**	--	--	--	--	--	0.15
Zinc	**0.053 J**	**0.027 J**	--	--	--	--	--	5
SPLP Metals (mg/L)								
Manganese	**0.39 L**	NA	--	--	--	--	--	0.15

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-145111-3
Client Project/Site: IDOT - 176-001-WO041
Revision: 1

For:
Ecology and Environment, Inc.
33 West Monroe St.
Suite 1410
Chicago, Illinois 60603

Attn: Mr. Dean Tiebout

Jodie Bracken

Authorized for release by:
7/19/2019 2:33:08 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

Richard Wright, Senior Project Manager
(708)534-5200
richard.wright@testamericainc.com

Table of Contents

Job ID: 500-145111-3

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-145111-3

Revised Report
Revision added to correct the client id prefix from 2273V to 2956V for samples 12 thru 18 per chains of custody.

Receipt
The samples were received on 5/8/2018 5:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.4º C and 3.6º C.

GC/MS VOA
Method(s) 8260B: The following analytes recovered outside control limits for the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) associated with analytical batch 432550: Chloroethane and Styrene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: 2-Nitroaniline, Bis(2-chloroethyl)ether, Isophorone and N-Nitrosodi-n-propylamine The laboratory control sample (LCS) for preparation batch 500-432247 and analytical batch 500-432418 recovered outside control limits for the following analytes: 2-Nitroaniline, Bis(2-chloroethyl)ether, Isophorone and N-Nitrosodiphenylamine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The following sample contained one acid and one base surrogate outside acceptance limits: (LCS 500-432247/2-A). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6020A: The continuing calibration verification (CCV) at line 113, associated with batch 500-432289 recovered above the upper control limit for Antimony and Thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B03 (0-4) — Lab Sample ID: 500-145111-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.5		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	100		0.61	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.81		0.25	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	6.3	B	3.1	0.29	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	2900	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	21		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.3		0.31	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	18000		12	6.4	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.31	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4100		6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.61	0.089	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	1500		31	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.48	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	0.37		0.31	0.079	mg/Kg	1	☼	6010B	Total/NA
Sodium	230		61	9.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	34		0.31	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	62		1.2	0.54	mg/Kg	1	☼	6010B	Total/NA
Barium	0.46	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.059	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.21		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.053	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.39		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.032		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA
pH	7.9		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 2956V-04-B03 (0-4)D — Lab Sample ID: 500-145111-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0058	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.015	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.013	J	0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0082	J	0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.017	J	0.040	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.011	J	0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	85		0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.65		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	8.8	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.29	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	27000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.1		0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	16		0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	17		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	18000		5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	340		0.57	0.082	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2956V-04-B03 (0-4)D (Continued)

Lab Sample ID: 500-145111-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	16		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1600		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.24	J	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	220		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	29		0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	65		1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.54		0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.020	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.027	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.019		0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA
pH	8.3		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-145111-12	2956V-04-B03 (0-4)	Solid	05/08/18 13:45	05/08/18 17:45	
500-145111-13	2956V-04-B03 (0-4)D	Solid	05/08/18 13:45	05/08/18 17:45	

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B03 (0-4)
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-12
Matrix: Solid
Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0085	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Chloroethane	<0.0049	*	0.0049	0.0015	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Styrene	<0.0020	*	0.0020	0.00059	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Vinyl acetate	<0.0049		0.0049	0.0017	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	☼	05/09/18 09:07	05/16/18 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/09/18 09:07*	*05/16/18 20:44*	*1*
Dibromofluoromethane	*108*		*75 - 126*	*05/09/18 09:07*	*05/16/18 20:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*05/09/18 09:07*	*05/16/18 20:44*	*1*
Toluene-d8 (Surr)	*116*		*75 - 124*	*05/09/18 09:07*	*05/16/18 20:44*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.091	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Bis(2-chloroethyl)ether	<0.20	*	0.20	0.061	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1

Client Sample ID: 2956V-04-B03 (0-4)
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-12
Matrix: Solid
Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
N-Nitrosodi-n-propylamine	<0.082	*	0.082	0.050	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Isophorone	<0.20	*	0.20	0.046	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2-Nitroaniline	<0.20	*	0.20	0.055	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1

Client Sample ID: 2956V-04-B03 (0-4)
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-12
Matrix: Solid
Percent Solids: 79.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.075	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Di-n-octyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	05/15/18 07:06	05/16/18 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*123*		*46 - 133*	*05/15/18 07:06*	*05/16/18 17:03*	*1*
Phenol-d5	*116*		*46 - 125*	*05/15/18 07:06*	*05/16/18 17:03*	*1*
Nitrobenzene-d5	*94*		*41 - 120*	*05/15/18 07:06*	*05/16/18 17:03*	*1*
2-Fluorobiphenyl	*104*		*44 - 121*	*05/15/18 07:06*	*05/16/18 17:03*	*1*
2,4,6-Tribromophenol	*98*		*25 - 139*	*05/15/18 07:06*	*05/16/18 17:03*	*1*
Terphenyl-d14	*141*		*35 - 160*	*05/15/18 07:06*	*05/16/18 17:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Arsenic	**4.5**		0.61	0.21	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Barium	**100**		0.61	0.070	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Beryllium	**0.81**		0.25	0.057	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Boron	**6.3**	**B**	3.1	0.29	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Cadmium	**0.19**	**B**	0.12	0.022	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Calcium	**2900**	**B**	12	2.1	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Chromium	**21**		0.61	0.30	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Cobalt	**8.3**		0.31	0.080	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Copper	**15**		0.61	0.17	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Iron	**18000**		12	6.4	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Lead	**12**		0.31	0.14	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Magnesium	**4100**		6.1	3.0	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Manganese	**340**		0.61	0.089	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Nickel	**21**		0.61	0.18	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Potassium	**1500**		31	11	mg/Kg	☼	05/11/18 07:44	05/16/18 02:39	1
Selenium	**0.48**	**J**	0.61	0.36	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Silver	**0.37**		0.31	0.079	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Sodium	**230**		61	9.1	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Thallium	<0.61		0.61	0.31	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Vanadium	**34**		0.31	0.072	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1
Zinc	**62**		1.2	0.54	mg/Kg	☼	05/11/18 07:44	05/11/18 22:52	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.46**	**J**	0.50	0.050	mg/L		05/12/18 14:18	05/14/18 20:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/12/18 14:18	05/14/18 20:28	1
Boron	**0.059**	**J**	0.50	0.050	mg/L		05/12/18 14:18	05/14/18 20:28	1

Client Sample ID: 2956V-04-B03 (0-4)

Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-12

Matrix: Solid
Percent Solids: 79.3

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/12/18 14:18	05/14/18 20:28	1
Chromium	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:28	1
Cobalt	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:28	1
Iron	<0.40		0.40	0.20	mg/L		05/12/18 14:18	05/14/18 20:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/12/18 14:18	05/14/18 20:28	1
Manganese	**0.21**		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:28	1
Nickel	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:28	1
Selenium	<0.050		0.050	0.020	mg/L		05/12/18 14:18	05/14/18 20:28	1
Silver	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:28	1
Zinc	**0.053**	**J**	0.50	0.020	mg/L		05/12/18 14:18	05/14/18 20:28	1

Method: 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.39**		0.025	0.010	mg/L		05/12/18 14:16	05/16/18 05:54	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^	0.0060	0.0060	mg/L		05/12/18 14:18	05/14/18 20:33	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		05/12/18 14:18	05/14/18 20:33	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/18 18:37	05/16/18 00:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.032**		0.019	0.0064	mg/Kg	☼	05/16/18 16:45	05/17/18 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.9**		0.20	0.20	SU			05/18/18 15:34	1

Client Sample ID: 2956V-04-B03 (0-4)D

Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-13

Matrix: Solid
Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0090	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Chloroethane	<0.0052	*	0.0052	0.0015	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Styrene	<0.0021	*	0.0021	0.00063	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Vinyl acetate	<0.0052		0.0052	0.0018	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	05/09/18 09:07	05/16/18 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*	*05/09/18 09:07*	*05/16/18 21:11*	*1*
Dibromofluoromethane	*120*		*75 - 126*	*05/09/18 09:07*	*05/16/18 21:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 134*	*05/09/18 09:07*	*05/16/18 21:11*	*1*
Toluene-d8 (Surr)	*123*		*75 - 124*	*05/09/18 09:07*	*05/16/18 21:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Bis(2-chloroethyl)ether	<0.20	*	0.20	0.060	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1

Client Sample ID: 2956V-04-B03 (0-4)D
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-13
Matrix: Solid
Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
N-Nitrosodi-n-propylamine	<0.081	*	0.081	0.049	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Isophorone	<0.20	*	0.20	0.045	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2-Nitroaniline	<0.20	*	0.20	0.054	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Phenanthrene	**0.0058**	**J**	0.040	0.0056	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Fluoranthene	**0.015**	**J**	0.040	0.0074	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Pyrene	**0.013**	**J**	0.040	0.0080	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Benzo[a]anthracene	**0.0082**	**J**	0.040	0.0054	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1

Client Sample ID: 2956V-04-B03 (0-4)D
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-13
Matrix: Solid
Percent Solids: 81.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.013**	**J**	0.040	0.011	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Benzo[b]fluoranthene	**0.017**	**J**	0.040	0.0086	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Benzo[a]pyrene	**0.011**	**J**	0.040	0.0077	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	05/15/18 07:06	05/16/18 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*117*		*46 - 133*	*05/15/18 07:06*	*05/16/18 17:31*	*1*
Phenol-d5	*108*		*46 - 125*	*05/15/18 07:06*	*05/16/18 17:31*	*1*
Nitrobenzene-d5	*94*		*41 - 120*	*05/15/18 07:06*	*05/16/18 17:31*	*1*
2-Fluorobiphenyl	*105*		*44 - 121*	*05/15/18 07:06*	*05/16/18 17:31*	*1*
2,4,6-Tribromophenol	*93*		*25 - 139*	*05/15/18 07:06*	*05/16/18 17:31*	*1*
Terphenyl-d14	*138*		*35 - 160*	*05/15/18 07:06*	*05/16/18 17:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Arsenic	**3.6**		0.57	0.19	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Barium	**85**		0.57	0.065	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Beryllium	**0.65**		0.23	0.053	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Boron	**8.8**	**B**	2.8	0.26	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Cadmium	**0.29**	**B**	0.11	0.020	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Calcium	**27000**	**B**	11	1.9	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Chromium	**17**		0.57	0.28	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Cobalt	**7.1**		0.28	0.074	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Copper	**16**		0.57	0.16	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Iron	**15000**		11	5.9	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Lead	**17**		0.28	0.13	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Magnesium	**18000**		5.7	2.8	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Manganese	**340**		0.57	0.082	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Nickel	**16**		0.57	0.17	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Potassium	**1600**		28	10	mg/Kg	☼	05/11/18 07:44	05/16/18 02:43	1
Selenium	**0.38**	**J**	0.57	0.33	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Silver	**0.24**	**J**	0.28	0.073	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Sodium	**220**		57	8.4	mg/Kg	☼	05/11/18 07:44	05/16/18 02:43	1
Thallium	<0.57		0.57	0.28	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Vanadium	**29**		0.28	0.067	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1
Zinc	**65**		1.1	0.50	mg/Kg	☼	05/11/18 07:44	05/11/18 23:04	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.54**		0.50	0.050	mg/L		05/12/18 14:18	05/14/18 20:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/12/18 14:18	05/14/18 20:33	1
Boron	<0.50		0.50	0.050	mg/L		05/12/18 14:18	05/14/18 20:33	1

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B03 (0-4)D
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-13
Matrix: Solid
Percent Solids: 81.9

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/12/18 14:18	05/14/18 20:33	1
Chromium	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:33	1
Cobalt	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:33	1
Iron	<0.40		0.40	0.20	mg/L		05/12/18 14:18	05/14/18 20:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/12/18 14:18	05/14/18 20:33	1
Manganese	**0.020**	**J**	0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:33	1
Nickel	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:33	1
Selenium	<0.050		0.050	0.020	mg/L		05/12/18 14:18	05/14/18 20:33	1
Silver	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 20:33	1
Zinc	**0.027**	**J**	0.50	0.020	mg/L		05/12/18 14:18	05/14/18 20:33	1

Method: 6020A - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^	0.0060	0.0060	mg/L		05/12/18 14:18	05/14/18 20:36	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		05/12/18 14:18	05/14/18 20:36	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/18 18:37	05/16/18 00:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.018	0.0059	mg/Kg	☼	05/16/18 16:45	05/17/18 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.3**		0.20	0.20	SU			05/14/18 16:46	1

Definitions/Glossary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Prep Batch: 431605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	5035	
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	5035	
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	5035	
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	5035	

Analysis Batch: 432550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	8260B	431605
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	8260B	431605
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	8260B	431605
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	8260B	431605
MB 500-432550/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-432550/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 500-432550/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 432247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	3541	
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	3541	
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	3541	
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	3541	
MB 500-432247/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-432247/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 432418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-432247/1-A	Method Blank	Total/NA	Solid	8270D	432247
LCS 500-432247/2-A	Lab Control Sample	Total/NA	Solid	8270D	432247

Analysis Batch: 432511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	8270D	432247
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	8270D	432247
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	8270D	432247
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	8270D	432247

Metals

Prep Batch: 431784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	3050B	
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	3050B	
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	3050B	
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	3050B	
MB 500-431784/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-431784/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Leach Batch: 431855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	SPLP East	Solid	1312	

Metals (Continued)

Leach Batch: 431855 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-14	2956V-04-B02 (0-4)	SPLP East	Solid	1312	
500-145111-15	2956V-04-B01 (0-4)	SPLP East	Solid	1312	
LB 500-431855/1-B	Method Blank	SPLP East	Solid	1312	

Leach Batch: 431857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	TCLP	Solid	1311	
500-145111-13	2956V-04-B03 (0-4)D	TCLP	Solid	1311	
500-145111-14	2956V-04-B02 (0-4)	TCLP	Solid	1311	
500-145111-15	2956V-04-B01 (0-4)	TCLP	Solid	1311	
LB 500-431857/1-B	Method Blank	TCLP	Solid	1311	
LB 500-431857/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 431974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	SPLP East	Solid	3010A	431855
500-145111-14	2956V-04-B02 (0-4)	SPLP East	Solid	3010A	431855
500-145111-15	2956V-04-B01 (0-4)	SPLP East	Solid	3010A	431855
LB 500-431855/1-B	Method Blank	SPLP East	Solid	3010A	431855
LCS 500-431974/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 431975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	TCLP	Solid	3010A	431857
500-145111-13	2956V-04-B03 (0-4)D	TCLP	Solid	3010A	431857
500-145111-14	2956V-04-B02 (0-4)	TCLP	Solid	3010A	431857
500-145111-15	2956V-04-B01 (0-4)	TCLP	Solid	3010A	431857
LB 500-431857/1-B	Method Blank	TCLP	Solid	3010A	431857
LCS 500-431975/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 432053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	6010B	431784
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	6010B	431784
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	6010B	431784
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	6010B	431784
MB 500-431784/1-A	Method Blank	Total/NA	Solid	6010B	431784
LCS 500-431784/2-A	Lab Control Sample	Total/NA	Solid	6010B	431784

Prep Batch: 432198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	TCLP	Solid	7470A	431857
500-145111-13	2956V-04-B03 (0-4)D	TCLP	Solid	7470A	431857
500-145111-14	2956V-04-B02 (0-4)	TCLP	Solid	7470A	431857
500-145111-15	2956V-04-B01 (0-4)	TCLP	Solid	7470A	431857
LB 500-431857/1-C	Method Blank	TCLP	Solid	7470A	431857
MB 500-432198/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-432198/13-A	Lab Control Sample	Total/NA	Solid	7470A	

Metals

Analysis Batch: 432243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	TCLP	Solid	6010B	431975
500-145111-13	2956V-04-B03 (0-4)D	TCLP	Solid	6010B	431975
500-145111-14	2956V-04-B02 (0-4)	TCLP	Solid	6010B	431975
500-145111-15	2956V-04-B01 (0-4)	TCLP	Solid	6010B	431975
LB 500-431857/1-B	Method Blank	TCLP	Solid	6010B	431975
LCS 500-431975/2-A	Lab Control Sample	Total/NA	Solid	6010B	431975

Analysis Batch: 432289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	TCLP	Solid	6020A	431975
500-145111-13	2956V-04-B03 (0-4)D	TCLP	Solid	6020A	431975
500-145111-14	2956V-04-B02 (0-4)	TCLP	Solid	6020A	431975
500-145111-15	2956V-04-B01 (0-4)	TCLP	Solid	6020A	431975
LB 500-431857/1-B	Method Blank	TCLP	Solid	6020A	431975
LCS 500-431975/2-A	Lab Control Sample	Total/NA	Solid	6020A	431975

Analysis Batch: 432510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	TCLP	Solid	7470A	432198
500-145111-13	2956V-04-B03 (0-4)D	TCLP	Solid	7470A	432198
500-145111-14	2956V-04-B02 (0-4)	TCLP	Solid	7470A	432198
500-145111-15	2956V-04-B01 (0-4)	TCLP	Solid	7470A	432198
LB 500-431857/1-C	Method Blank	TCLP	Solid	7470A	432198
MB 500-432198/12-A	Method Blank	Total/NA	Solid	7470A	432198
LCS 500-432198/13-A	Lab Control Sample	Total/NA	Solid	7470A	432198

Analysis Batch: 432518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	SPLP East	Solid	6010B	431974
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	6010B	431784
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	6010B	431784
500-145111-14	2956V-04-B02 (0-4)	SPLP East	Solid	6010B	431974
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	6010B	431784
500-145111-15	2956V-04-B01 (0-4)	SPLP East	Solid	6010B	431974
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	6010B	431784
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	6010B	431784
LB 500-431855/1-B	Method Blank	SPLP East	Solid	6010B	431974
LCS 500-431974/2-A	Lab Control Sample	Total/NA	Solid	6010B	431974

Prep Batch: 432633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	7471B	
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	7471B	
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	7471B	
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	7471B	
MB 500-432633/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-432633/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 432812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	7471B	432633

Metals (Continued)

Analysis Batch: 432812 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	7471B	432633
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	7471B	432633
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	7471B	432633
MB 500-432633/12-A	Method Blank	Total/NA	Solid	7471B	432633
LCS 500-432633/13-A	Lab Control Sample	Total/NA	Solid	7471B	432633

General Chemistry

Analysis Batch: 431772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	Moisture	
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	Moisture	
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	Moisture	
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	Moisture	

Analysis Batch: 432288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-13	2956V-04-B03 (0-4)D	Total/NA	Solid	9045D	
500-145111-14	2956V-04-B02 (0-4)	Total/NA	Solid	9045D	
500-145111-15	2956V-04-B01 (0-4)	Total/NA	Solid	9045D	

Analysis Batch: 433205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145111-12	2956V-04-B03 (0-4)	Total/NA	Solid	9045D	

Surrogate Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(75-131)	(75-126)	(70-134)	(75-124)
500-145111-12	2956V-04-B03 (0-4)	102	108	107	116
500-145111-13	2956V-04-B03 (0-4)D	102	120	117	123
500-145111-14	2956V-04-B02 (0-4)	110	109	106	103
500-145111-15	2956V-04-B01 (0-4)	99	107	108	100
LCS 500-432550/3	Lab Control Sample	103	106	110	97
LCSD 500-432550/4	Lab Control Sample Dup	102	107	108	110
MB 500-432550/6	Method Blank	104	128 X	131	109

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		2FP	PHL	NBZ	FBP	TBP	TPHL
Lab Sample ID	Client Sample ID	(46-133)	(46-125)	(41-120)	(44-121)	(25-139)	(35-160)
500-145111-12	2956V-04-B03 (0-4)	123	116	94	104	98	141
500-145111-13	2956V-04-B03 (0-4)D	117	108	94	105	93	138
500-145111-14	2956V-04-B02 (0-4)	121	111	92	106	99	136
500-145111-15	2956V-04-B01 (0-4)	127	115	99	114	99	139
LCS 500-432247/2-A	Lab Control Sample	123	126 X	128 X	93	104	116
MB 500-432247/1-A	Method Blank	119	121	120	91	102	128

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPHL = Terphenyl-d14

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-432550/6
Matrix: Solid
Analysis Batch: 432550

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0087	mg/Kg			05/16/18 15:17	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg			05/16/18 15:17	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg			05/16/18 15:17	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg			05/16/18 15:17	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg			05/16/18 15:17	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg			05/16/18 15:17	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg			05/16/18 15:17	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg			05/16/18 15:17	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg			05/16/18 15:17	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg			05/16/18 15:17	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg			05/16/18 15:17	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg			05/16/18 15:17	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg			05/16/18 15:17	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg			05/16/18 15:17	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg			05/16/18 15:17	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg			05/16/18 15:17	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg			05/16/18 15:17	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg			05/16/18 15:17	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg			05/16/18 15:17	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg			05/16/18 15:17	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg			05/16/18 15:17	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg			05/16/18 15:17	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg			05/16/18 15:17	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg			05/16/18 15:17	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg			05/16/18 15:17	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg			05/16/18 15:17	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg			05/16/18 15:17	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg			05/16/18 15:17	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg			05/16/18 15:17	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg			05/16/18 15:17	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg			05/16/18 15:17	1
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg			05/16/18 15:17	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg			05/16/18 15:17	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg			05/16/18 15:17	1
Vinyl acetate	<0.0050		0.0050	0.0017	mg/Kg			05/16/18 15:17	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg			05/16/18 15:17	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg			05/16/18 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*75 - 131*		*05/16/18 15:17*	*1*
Dibromofluoromethane	*128*	*X*	*75 - 126*		*05/16/18 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*131*		*70 - 134*		*05/16/18 15:17*	*1*
Toluene-d8 (Surr)	*109*		*75 - 124*		*05/16/18 15:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-432550/3
Matrix: Solid
Analysis Batch: 432550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0500	0.0633		mg/Kg		127	40 - 150
Benzene	0.0500	0.0540		mg/Kg		108	70 - 125
Bromodichloromethane	0.0500	0.0456		mg/Kg		91	67 - 129
Bromoform	0.0500	0.0556		mg/Kg		111	68 - 136
Bromomethane	0.0500	0.0403		mg/Kg		81	70 - 130
2-Butanone (MEK)	0.0500	0.0558		mg/Kg		112	47 - 138
Carbon disulfide	0.0500	0.0554		mg/Kg		111	70 - 129
Carbon tetrachloride	0.0500	0.0566		mg/Kg		113	75 - 125
Chlorobenzene	0.0500	0.0512		mg/Kg		102	50 - 150
Chloroethane	0.0500	0.0354	*	mg/Kg		71	75 - 125
Chloroform	0.0500	0.0555		mg/Kg		111	57 - 135
Chloromethane	0.0500	0.0535		mg/Kg		107	70 - 125
cis-1,2-Dichloroethene	0.0500	0.0526		mg/Kg		105	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0438		mg/Kg		88	70 - 125
Dibromochloromethane	0.0500	0.0558		mg/Kg		112	69 - 125
1,1-Dichloroethane	0.0500	0.0539		mg/Kg		108	70 - 125
1,2-Dichloroethane	0.0500	0.0584		mg/Kg		117	70 - 130
1,1-Dichloroethene	0.0500	0.0518		mg/Kg		104	70 - 120
1,2-Dichloropropane	0.0500	0.0461		mg/Kg		92	70 - 125
Ethylbenzene	0.0500	0.0521		mg/Kg		104	61 - 136
2-Hexanone	0.0500	0.0528		mg/Kg		106	48 - 146
Methylene Chloride	0.0500	0.0511		mg/Kg		102	70 - 126
4-Methyl-2-pentanone (MIBK)	0.0500	0.0412		mg/Kg		82	50 - 148
Methyl tert-butyl ether	0.0500	0.0544		mg/Kg		109	50 - 140
Styrene	0.0500	0.0541		mg/Kg		108	70 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.0527		mg/Kg		105	70 - 122
Tetrachloroethene	0.0500	0.0470		mg/Kg		94	70 - 124
Toluene	0.0500	0.0472		mg/Kg		94	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0525		mg/Kg		105	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0481		mg/Kg		96	70 - 125
1,1,1-Trichloroethane	0.0500	0.0577		mg/Kg		115	70 - 128
1,1,2-Trichloroethane	0.0500	0.0479		mg/Kg		96	70 - 125
Trichloroethene	0.0500	0.0453		mg/Kg		91	70 - 125
Vinyl acetate	0.0500	0.0439		mg/Kg		88	40 - 153
Vinyl chloride	0.0500	0.0529		mg/Kg		106	70 - 125
Xylenes, Total	0.100	0.106		mg/Kg		106	53 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*75 - 131*
Dibromofluoromethane	*106*		*75 - 126*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*
Toluene-d8 (Surr)	*97*		*75 - 124*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-432550/4
Matrix: Solid
Analysis Batch: 432550

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			0.0500	0.0510		mg/Kg		102	40 - 150	22	30
Benzene			0.0500	0.0554		mg/Kg		111	70 - 125	3	30
Bromodichloromethane			0.0500	0.0607		mg/Kg		121	67 - 129	29	30
Bromoform			0.0500	0.0653		mg/Kg		131	68 - 136	16	30
Bromomethane			0.0500	0.0429		mg/Kg		86	70 - 130	6	30
2-Butanone (MEK)			0.0500	0.0491		mg/Kg		98	47 - 138	13	30
Carbon disulfide			0.0500	0.0566		mg/Kg		113	70 - 129	2	30
Carbon tetrachloride			0.0500	0.0577		mg/Kg		115	75 - 125	2	30
Chlorobenzene			0.0500	0.0539		mg/Kg		108	50 - 150	5	30
Chloroethane			0.0500	0.0453		mg/Kg		91	75 - 125	25	30
Chloroform			0.0500	0.0578		mg/Kg		116	57 - 135	4	30
Chloromethane			0.0500	0.0590		mg/Kg		118	70 - 125	10	30
cis-1,2-Dichloroethene			0.0500	0.0542		mg/Kg		108	70 - 125	3	30
cis-1,3-Dichloropropene			0.0500	0.0578		mg/Kg		116	70 - 125	28	30
Dibromochloromethane			0.0500	0.0574		mg/Kg		115	69 - 125	3	30
1,1-Dichloroethane			0.0500	0.0544		mg/Kg		109	70 - 125	1	30
1,2-Dichloroethane			0.0500	0.0605		mg/Kg		121	70 - 130	4	30
1,1-Dichloroethene			0.0500	0.0547		mg/Kg		109	70 - 120	6	30
1,2-Dichloropropane			0.0500	0.0584		mg/Kg		117	70 - 125	23	30
Ethylbenzene			0.0500	0.0521		mg/Kg		104	61 - 136	0	30
2-Hexanone			0.0500	0.0439		mg/Kg		88	48 - 146	18	30
Methylene Chloride			0.0500	0.0528		mg/Kg		106	70 - 126	3	30
4-Methyl-2-pentanone (MIBK)			0.0500	0.0481		mg/Kg		96	50 - 148	15	30
Methyl tert-butyl ether			0.0500	0.0560		mg/Kg		112	50 - 140	3	30
Styrene			0.0500	0.0644	*	mg/Kg		129	70 - 125	17	30
1,1,2,2-Tetrachloroethane			0.0500	0.0541		mg/Kg		108	70 - 122	3	30
Tetrachloroethene			0.0500	0.0506		mg/Kg		101	70 - 124	7	30
Toluene			0.0500	0.0566		mg/Kg		113	70 - 125	18	30
trans-1,2-Dichloroethene			0.0500	0.0542		mg/Kg		108	70 - 125	3	30
trans-1,3-Dichloropropene			0.0500	0.0528		mg/Kg		106	70 - 125	9	30
1,1,1-Trichloroethane			0.0500	0.0604		mg/Kg		121	70 - 128	5	30
1,1,2-Trichloroethane			0.0500	0.0523		mg/Kg		105	70 - 125	9	30
Trichloroethene			0.0500	0.0531		mg/Kg		106	70 - 125	16	30
Vinyl acetate			0.0500	0.0453		mg/Kg		91	40 - 153	3	30
Vinyl chloride			0.0500	0.0574		mg/Kg		115	70 - 125	8	30
Xylenes, Total			0.100	0.116		mg/Kg		116	53 - 147	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*75 - 131*
Dibromofluoromethane	*107*		*75 - 126*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*
Toluene-d8 (Surr)	*110*		*75 - 124*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-432247/1-A
Matrix: Solid
Analysis Batch: 432418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.17		0.17	0.074	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.041	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Isophorone	<0.17		0.17	0.037	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4-Chloroaniline	<0.67		0.67	0.16	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2-Nitrophenol	<0.33		0.33	0.079	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Acenaphthene	<0.033		0.033	0.0060	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Fluorene	<0.033		0.033	0.0047	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Anthracene	<0.033		0.033	0.0056	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Carbazole	<0.17		0.17	0.083	mg/Kg		05/15/18 07:06	05/15/18 21:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-432247/1-A
Matrix: Solid
Analysis Batch: 432418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Pyrene	<0.033		0.033	0.0066	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Chrysene	<0.033		0.033	0.0091	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg		05/15/18 07:06	05/15/18 21:30	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg		05/15/18 07:06	05/15/18 21:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*119*		*46 - 133*	*05/15/18 07:06*	*05/15/18 21:30*	*1*
Phenol-d5	*121*		*46 - 125*	*05/15/18 07:06*	*05/15/18 21:30*	*1*
Nitrobenzene-d5	*120*		*41 - 120*	*05/15/18 07:06*	*05/15/18 21:30*	*1*
2-Fluorobiphenyl	*91*		*44 - 121*	*05/15/18 07:06*	*05/15/18 21:30*	*1*
2,4,6-Tribromophenol	*102*		*25 - 139*	*05/15/18 07:06*	*05/15/18 21:30*	*1*
Terphenyl-d14	*128*		*35 - 160*	*05/15/18 07:06*	*05/15/18 21:30*	*1*

Lab Sample ID: LCS 500-432247/2-A
Matrix: Solid
Analysis Batch: 432418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	1.33	1.50		mg/Kg		112	56 - 122
Bis(2-chloroethyl)ether	1.33	1.49	*	mg/Kg		112	55 - 111
1,3-Dichlorobenzene	1.33	1.04		mg/Kg		78	60 - 110
1,4-Dichlorobenzene	1.33	1.02		mg/Kg		77	61 - 110
1,2-Dichlorobenzene	1.33	1.07		mg/Kg		80	62 - 110
2-Methylphenol	1.33	1.37		mg/Kg		103	60 - 120
2,2'-oxybis[1-chloropropane]	1.33	1.21		mg/Kg		90	40 - 124
N-Nitrosodi-n-propylamine	1.33	1.60	*	mg/Kg		120	56 - 118
Hexachloroethane	1.33	1.33		mg/Kg		99	61 - 110
2-Chlorophenol	1.33	1.27		mg/Kg		95	64 - 110
Nitrobenzene	1.33	1.41		mg/Kg		106	60 - 116
Bis(2-chloroethoxy)methane	1.33	1.37		mg/Kg		103	60 - 112
1,2,4-Trichlorobenzene	1.33	0.953		mg/Kg		71	62 - 110
Isophorone	1.33	1.71	*	mg/Kg		128	55 - 110
2,4-Dimethylphenol	1.33	1.28		mg/Kg		96	60 - 110
Hexachlorobutadiene	1.33	0.958		mg/Kg		72	56 - 120
Naphthalene	1.33	1.11		mg/Kg		84	63 - 110
2,4-Dichlorophenol	1.33	1.02		mg/Kg		76	58 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-432247/2-A
Matrix: Solid
Analysis Batch: 432418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	1.33	1.02		mg/Kg		76	30 - 150
2,4,6-Trichlorophenol	1.33	1.10		mg/Kg		82	57 - 120
2,4,5-Trichlorophenol	1.33	1.08		mg/Kg		81	50 - 120
Hexachlorocyclopentadiene	1.33	0.927		mg/Kg		70	10 - 106
2-Methylnaphthalene	1.33	1.15		mg/Kg		86	62 - 110
2-Nitroaniline	1.33	1.88	*	mg/Kg		141	57 - 124
2-Chloronaphthalene	1.33	1.06		mg/Kg		80	64 - 110
4-Chloro-3-methylphenol	1.33	1.31		mg/Kg		98	61 - 114
2,6-Dinitrotoluene	1.33	1.28		mg/Kg		96	67 - 120
2-Nitrophenol	1.33	1.29		mg/Kg		97	60 - 120
3-Nitroaniline	1.33	0.967		mg/Kg		73	40 - 122
Dimethyl phthalate	1.33	1.37		mg/Kg		103	64 - 110
2,4-Dinitrophenol	2.67	1.03		mg/Kg		39	10 - 100
Acenaphthylene	1.33	1.10		mg/Kg		83	60 - 110
2,4-Dinitrotoluene	1.33	1.23		mg/Kg		93	62 - 117
Acenaphthene	1.33	1.03		mg/Kg		77	58 - 110
Dibenzofuran	1.33	1.04		mg/Kg		78	64 - 110
4-Nitrophenol	2.67	2.80		mg/Kg		105	30 - 122
Fluorene	1.33	1.05		mg/Kg		79	62 - 120
4-Nitroaniline	1.33	1.32		mg/Kg		99	60 - 160
4-Bromophenyl phenyl ether	1.33	1.21		mg/Kg		91	63 - 110
Hexachlorobenzene	1.33	1.34		mg/Kg		101	55 - 117
Diethyl phthalate	1.33	1.09		mg/Kg		82	58 - 120
4-Chlorophenyl phenyl ether	1.33	1.09		mg/Kg		82	63 - 110
Pentachlorophenol	2.67	2.58		mg/Kg		97	13 - 112
N-Nitrosodiphenylamine	1.33	1.25		mg/Kg		94	65 - 112
4,6-Dinitro-2-methylphenol	2.67	1.65		mg/Kg		62	10 - 110
Phenanthrene	1.33	1.14		mg/Kg		85	62 - 120
Anthracene	1.33	1.15		mg/Kg		86	63 - 110
Carbazole	1.33	1.44		mg/Kg		108	59 - 158
Di-n-butyl phthalate	1.33	1.31		mg/Kg		98	65 - 120
Fluoranthene	1.33	1.31		mg/Kg		98	62 - 120
Pyrene	1.33	1.22		mg/Kg		92	63 - 120
Butyl benzyl phthalate	1.33	1.37		mg/Kg		103	61 - 116
Benzo[a]anthracene	1.33	1.33		mg/Kg		100	63 - 110
Chrysene	1.33	1.50		mg/Kg		113	63 - 120
3,3'-Dichlorobenzidine	1.33	1.22		mg/Kg		91	49 - 112
Bis(2-ethylhexyl) phthalate	1.33	1.29		mg/Kg		97	63 - 118
Di-n-octyl phthalate	1.33	1.45		mg/Kg		109	63 - 119
Benzo[b]fluoranthene	1.33	1.24		mg/Kg		93	62 - 120
Benzo[k]fluoranthene	1.33	1.29		mg/Kg		97	65 - 120
Benzo[a]pyrene	1.33	1.30		mg/Kg		98	61 - 120
Indeno[1,2,3-cd]pyrene	1.33	1.33		mg/Kg		100	57 - 127
Dibenz(a,h)anthracene	1.33	1.28		mg/Kg		96	64 - 119
Benzo[g,h,i]perylene	1.33	1.36		mg/Kg		102	64 - 120
3 & 4 Methylphenol	1.33	1.34		mg/Kg		101	57 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-432247/2-A
Matrix: Solid
Analysis Batch: 432418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432247

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*123*		*46 - 133*
Phenol-d5	*126*	*X*	*46 - 125*
Nitrobenzene-d5	*128*	*X*	*41 - 120*
2-Fluorobiphenyl	*93*		*44 - 121*
2,4,6-Tribromophenol	*104*		*25 - 139*
Terphenyl-d14	*116*		*35 - 160*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-431784/1-A
Matrix: Solid
Analysis Batch: 432053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 431784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<2.0		2.0	0.39	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Arsenic	<1.0		1.0	0.34	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Barium	<1.0		1.0	0.11	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Beryllium	<0.40		0.40	0.093	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Boron	0.586	J	5.0	0.47	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Cadmium	0.0853	J	0.20	0.036	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Calcium	6.57	J	20	3.4	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Chromium	<1.0		1.0	0.50	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Cobalt	<0.50		0.50	0.13	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Copper	<1.0		1.0	0.28	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Iron	<20		20	10	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Lead	<0.50		0.50	0.23	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Magnesium	<10		10	5.0	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Manganese	<1.0		1.0	0.15	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Nickel	<1.0		1.0	0.29	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Potassium	<50		50	18	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Selenium	<1.0		1.0	0.59	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Silver	<0.50		0.50	0.13	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Sodium	<100		100	15	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Thallium	<1.0		1.0	0.50	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Vanadium	<0.50		0.50	0.12	mg/Kg		05/11/18 07:44	05/11/18 21:37	1
Zinc	<2.0		2.0	0.88	mg/Kg		05/11/18 07:44	05/11/18 21:37	1

Lab Sample ID: LCS 500-431784/2-A
Matrix: Solid
Analysis Batch: 432053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.4		mg/Kg		95	80 - 120
Arsenic	10.0	9.55		mg/Kg		96	80 - 120
Barium	200	196		mg/Kg		98	80 - 120
Beryllium	5.00	4.69		mg/Kg		94	80 - 120
Boron	100	86.6		mg/Kg		87	80 - 120
Cadmium	5.00	4.67		mg/Kg		93	80 - 120
Calcium	1000	931		mg/Kg		93	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-431784/2-A
Matrix: Solid
Analysis Batch: 432053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	20.0	18.7		mg/Kg		94	80 - 120
Cobalt	50.0	46.9		mg/Kg		94	80 - 120
Copper	25.0	25.1		mg/Kg		100	80 - 120
Iron	100	98.6		mg/Kg		99	80 - 120
Lead	10.0	9.11		mg/Kg		91	80 - 120
Magnesium	1000	931		mg/Kg		93	80 - 120
Manganese	50.0	46.8		mg/Kg		94	80 - 120
Nickel	50.0	46.5		mg/Kg		93	80 - 120
Potassium	1000	1070		mg/Kg		107	80 - 120
Selenium	10.0	8.64		mg/Kg		86	80 - 120
Silver	5.00	4.57		mg/Kg		91	80 - 120
Sodium	1000	1060		mg/Kg		106	80 - 120
Thallium	10.0	8.51		mg/Kg		85	80 - 120
Vanadium	50.0	47.8		mg/Kg		96	80 - 120
Zinc	50.0	45.0		mg/Kg		90	80 - 120

Lab Sample ID: LCS 500-431974/2-A
Matrix: Solid
Analysis Batch: 432518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431974

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.500	0.496		mg/L		99	80 - 120

Lab Sample ID: LCS 500-431975/2-A
Matrix: Solid
Analysis Batch: 432243

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.492	J	mg/L		98	80 - 120
Beryllium	0.0500	0.0489		mg/L		98	80 - 120
Boron	1.00	0.888		mg/L		89	80 - 120
Cadmium	0.0500	0.0475		mg/L		95	80 - 120
Chromium	0.200	0.190		mg/L		95	80 - 120
Cobalt	0.500	0.479		mg/L		96	80 - 120
Iron	1.00	1.07		mg/L		107	80 - 120
Lead	0.100	0.0885		mg/L		89	80 - 120
Manganese	0.500	0.483		mg/L		97	80 - 120
Nickel	0.500	0.486		mg/L		97	80 - 120
Selenium	0.100	0.0813		mg/L		81	80 - 120
Silver	0.0500	0.0471		mg/L		94	80 - 120
Zinc	0.500	0.485	J	mg/L		97	80 - 120

Lab Sample ID: LB 500-431857/1-B
Matrix: Solid
Analysis Batch: 432243

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 431975

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.50		0.50	0.050	mg/L		05/12/18 14:18	05/14/18 19:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/12/18 14:18	05/14/18 19:28	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 500-431857/1-B
Matrix: Solid
Analysis Batch: 432243

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 431975

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.50		0.50	0.050	mg/L		05/12/18 14:18	05/14/18 19:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		05/12/18 14:18	05/14/18 19:28	1
Chromium	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 19:28	1
Cobalt	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 19:28	1
Iron	<0.40		0.40	0.20	mg/L		05/12/18 14:18	05/14/18 19:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/12/18 14:18	05/14/18 19:28	1
Manganese	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 19:28	1
Nickel	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 19:28	1
Selenium	<0.050		0.050	0.020	mg/L		05/12/18 14:18	05/14/18 19:28	1
Silver	<0.025		0.025	0.010	mg/L		05/12/18 14:18	05/14/18 19:28	1
Zinc	<0.50		0.50	0.020	mg/L		05/12/18 14:18	05/14/18 19:28	1

Lab Sample ID: LB 500-431855/1-B
Matrix: Solid
Analysis Batch: 432518

Client Sample ID: Method Blank
Prep Type: SPLP East
Prep Batch: 431974

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.025		0.025	0.010	mg/L		05/12/18 14:16	05/16/18 04:53	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 500-431975/2-A
Matrix: Solid
Analysis Batch: 432289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 431975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.512	^	mg/L		102	80 - 120
Thallium	0.100	0.101	^	mg/L		101	80 - 120

Lab Sample ID: LB 500-431857/1-B
Matrix: Solid
Analysis Batch: 432289

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 431975

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	^	0.0060	0.0060	mg/L		05/12/18 14:18	05/14/18 19:41	1
Thallium	<0.0020	^	0.0020	0.0020	mg/L		05/12/18 14:18	05/14/18 19:41	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 500-432198/12-A
Matrix: Solid
Analysis Batch: 432510

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/18 18:37	05/15/18 23:20	1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LCS 500-432198/13-A
Matrix: Solid
Analysis Batch: 432510

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00213		mg/L		107	80 - 120

Lab Sample ID: LB 500-431857/1-C
Matrix: Solid
Analysis Batch: 432510

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 432198

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/14/18 18:37	05/15/18 23:25	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-432633/12-A
Matrix: Solid
Analysis Batch: 432812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0056	mg/Kg		05/16/18 16:45	05/17/18 10:13	1

Lab Sample ID: LCS 500-432633/13-A
Matrix: Solid
Analysis Batch: 432812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.152		mg/Kg		91	80 - 120

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B03 (0-4)

Lab Sample ID: 500-145111-12
Matrix: Solid
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			431855	05/11/18 13:20	JLC	TAL CHI
SPLP East	Prep	3010A			431974	05/12/18 14:16	BDE	TAL CHI
SPLP East	Analysis	6010B		1	432518	05/16/18 05:54	PJ1	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	432243	05/14/18 20:28	EEN	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	432289	05/14/18 20:33	FXG	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	7470A			432198	05/14/18 18:37	PFK	TAL CHI
TCLP	Analysis	7470A		1	432510	05/16/18 00:07	EEN	TAL CHI
Total/NA	Analysis	9045D		1	433205		SMO	TAL CHI
					(Start)	05/18/18 15:34		
					(End)	05/18/18 15:37		
Total/NA	Analysis	Moisture		1	431772	05/11/18 07:31	LWN	TAL CHI

Client Sample ID: 2956V-04-B03 (0-4)

Lab Sample ID: 500-145111-12
Matrix: Solid
Date Collected: 05/08/18 13:45
Percent Solids: 79.3
Date Received: 05/08/18 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			431605	05/09/18 09:07	DJD	TAL CHI
Total/NA	Analysis	8260B		1	432550	05/16/18 20:44	DJD	TAL CHI
Total/NA	Prep	3541			432247	05/15/18 07:06	STW	TAL CHI
Total/NA	Analysis	8270D		1	432511	05/16/18 17:03	GES	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432518	05/16/18 02:39	PJ1	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432053	05/11/18 22:52	EEN	TAL CHI
Total/NA	Prep	7471B			432633	05/16/18 16:45	EEN	TAL CHI
Total/NA	Analysis	7471B		1	432812	05/17/18 10:50	PFK	TAL CHI

Client Sample ID: 2956V-04-B03 (0-4)D

Lab Sample ID: 500-145111-13
Matrix: Solid
Date Collected: 05/08/18 13:45
Date Received: 05/08/18 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	432243	05/14/18 20:33	EEN	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	432289	05/14/18 20:36	FXG	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B03 (0-4)D

Lab Sample ID: 500-145111-13

Date Collected: 05/08/18 13:45
Matrix: Solid
Date Received: 05/08/18 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	7470A			432198	05/14/18 18:37	PFK	TAL CHI
TCLP	Analysis	7470A		1	432510	05/16/18 00:09	EEN	TAL CHI
Total/NA	Analysis	9045D		1	432288		SMO	TAL CHI
					(Start)	05/14/18 16:46		
					(End)	05/14/18 16:50		
Total/NA	Analysis	Moisture		1	431772	05/11/18 07:31	LWN	TAL CHI

Client Sample ID: 2956V-04-B03 (0-4)D

Lab Sample ID: 500-145111-13

Date Collected: 05/08/18 13:45
Matrix: Solid
Date Received: 05/08/18 17:45
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			431605	05/09/18 09:07	DJD	TAL CHI
Total/NA	Analysis	8260B		1	432550	05/16/18 21:11	DJD	TAL CHI
Total/NA	Prep	3541			432247	05/15/18 07:06	STW	TAL CHI
Total/NA	Analysis	8270D		1	432511	05/16/18 17:31	GES	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432518	05/16/18 02:43	PJ1	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432053	05/11/18 23:04	EEN	TAL CHI
Total/NA	Prep	7471B			432633	05/16/18 16:45	EEN	TAL CHI
Total/NA	Analysis	7471B		1	432812	05/17/18 10:53	PFK	TAL CHI

Client Sample ID: 2956V-04-B02 (0-4)

Lab Sample ID: 500-145111-14

Date Collected: 05/08/18 14:16
Matrix: Solid
Date Received: 05/08/18 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			431855	05/11/18 13:20	JLC	TAL CHI
SPLP East	Prep	3010A			431974	05/12/18 14:16	BDE	TAL CHI
SPLP East	Analysis	6010B		1	432518	05/16/18 06:02	PJ1	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	432243	05/14/18 20:45	EEN	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	432289	05/14/18 20:39	FXG	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	7470A			432198	05/14/18 18:37	PFK	TAL CHI
TCLP	Analysis	7470A		1	432510	05/16/18 00:12	EEN	TAL CHI
Total/NA	Analysis	9045D		1	432288		SMO	TAL CHI
					(Start)	05/14/18 16:50		
					(End)	05/14/18 16:53		
Total/NA	Analysis	Moisture		1	431772	05/11/18 07:31	LWN	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B02 (0-4)

Lab Sample ID: 500-145111-14
Date Collected: 05/08/18 14:16
Matrix: Solid
Date Received: 05/08/18 17:45
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			431605	05/09/18 09:07	DJD	TAL CHI
Total/NA	Analysis	8260B		1	432550	05/16/18 21:39	DJD	TAL CHI
Total/NA	Prep	3541			432247	05/15/18 07:06	STW	TAL CHI
Total/NA	Analysis	8270D		1	432511	05/16/18 18:00	GES	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432518	05/16/18 02:47	PJ1	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432053	05/11/18 23:08	EEN	TAL CHI
Total/NA	Prep	7471B			432633	05/16/18 16:45	EEN	TAL CHI
Total/NA	Analysis	7471B		1	432812	05/17/18 10:56	PFK	TAL CHI

Client Sample ID: 2956V-04-B01 (0-4)

Lab Sample ID: 500-145111-15
Date Collected: 05/08/18 14:30
Matrix: Solid
Date Received: 05/08/18 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP East	Leach	1312			431855	05/11/18 13:20	JLC	TAL CHI
SPLP East	Prep	3010A			431974	05/12/18 14:16	BDE	TAL CHI
SPLP East	Analysis	6010B		1	432518	05/16/18 06:06	PJ1	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6010B		1	432243	05/14/18 20:49	EEN	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	3010A			431975	05/12/18 14:18	BDE	TAL CHI
TCLP	Analysis	6020A		1	432289	05/14/18 20:43	FXG	TAL CHI
TCLP	Leach	1311			431857	05/11/18 13:20	JLC	TAL CHI
TCLP	Prep	7470A			432198	05/14/18 18:37	PFK	TAL CHI
TCLP	Analysis	7470A		1	432510	05/16/18 00:14	EEN	TAL CHI
Total/NA	Analysis	9045D		1	432288		SMO	TAL CHI
					(Start)	05/14/18 16:53		
					(End)	05/14/18 16:57		
Total/NA	Analysis	Moisture		1	431772	05/11/18 07:31	LWN	TAL CHI

Client Sample ID: 2956V-04-B01 (0-4)

Lab Sample ID: 500-145111-15
Date Collected: 05/08/18 14:30
Matrix: Solid
Date Received: 05/08/18 17:45
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			431605	05/09/18 09:07	DJD	TAL CHI
Total/NA	Analysis	8260B		1	432550	05/16/18 22:06	DJD	TAL CHI
Total/NA	Prep	3541			432247	05/15/18 07:06	STW	TAL CHI
Total/NA	Analysis	8270D		1	432511	05/16/18 18:29	GES	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432518	05/16/18 02:51	PJ1	TAL CHI

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO041

Job ID: 500-145111-3

Client Sample ID: 2956V-04-B01 (0-4)
Date Collected: 05/08/18 14:30
Date Received: 05/08/18 17:45

Lab Sample ID: 500-145111-15
Matrix: Solid
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		10	432518	05/16/18 02:55	PJ1	TAL CHI
Total/NA	Prep	3050B			431784	05/11/18 07:44	JEF	TAL CHI
Total/NA	Analysis	6010B		1	432053	05/11/18 23:12	EEN	TAL CHI
Total/NA	Prep	7471B			432633	05/16/18 16:45	EEN	TAL CHI
Total/NA	Analysis	7471B		1	432812	05/17/18 10:58	PFK	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Ecology and Environment, Inc.
Job ID: 500-145111-3
Project/Site: IDOT - 176-001-WO041

Laboratory: Eurofins TestAmerica, Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-145111
Chain of Custody Number:
Page ____ of ____
Temperature °C of Cooler:

Client: E+E
Client Project #: 1009841.004102
Project Name: 176-001-W041
Project Location/State: Marengo, IL
Lab Project #:
Sampler: MF, JH
Lab PM: D. Wright

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOC	SVOC	Total (TCLP) Metals	pH	Percent Solids					Comments
12		2956V-04-B03(0-4)	5/8/18	1345	5	S		X	X	X	X	X					
13		2956V-04-B03(0-4)D	5/8/18	1345	5	S		X	X	X	X	X					
14		2956V-04-B02(6-4)½	5/8/18	1416	5	S		X	X	X	X	X					
15		2956V-04-B01(0-4)	5/8/18	1430	5	S		X	X	X	X	X					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ✓ 10 Days ___ 15 Days ____ Other
Requested Due Date: ____

Sample Disposal
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
J. Hughes	E+E	5/8/18	1530	B. Neal	TA	5/8/18	1530
B. Neal	TA	5/8/18	1715		TA	05/08/18	1745

Lab Courier ✓
Shipped
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 500-145111-3

Login Number: 145111
List Number: 1
Creator: Kelsey, Shawn M

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(3.6)(2.4)c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	