



Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

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: FAI 55 (I-55) Office Phone Number, if available: _____

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

26000 - 27000 blocks of S. Frontage Road (ISGS #3516-1)

City: Channahon State: IL Zip Code: _____

County: Will Township: Channahon and Wilmington

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

Latitude: 41.374398° Longitude: -88.192507°

(Decimal Degrees) (-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: _____

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

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

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

Contact: Kristine Kutscher

Contact: Kristine Kutscher

Email, if available: Kristine.Kutscher@illinois.gov

Email, if available: Kristine.Kutscher@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: FAI 55 (I-55)

Latitude: 41.374398° Longitude: -88.192507°

Uncontaminated Site 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 3516-01-B01 through 3516-01-B27 were sampled within the construction zone at ISGS #3516-1 (ROW). Refer to PSI Report for ISGS #3516-1 (ROW) including Table 4-3, and Figures 4-1 through 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 J147163-1 and J147321-1.

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

I, Neil J. 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 Street

City: Chicago State: IL Zip Code: 60603

Phone: 312-578-9243

Neil J. Brown

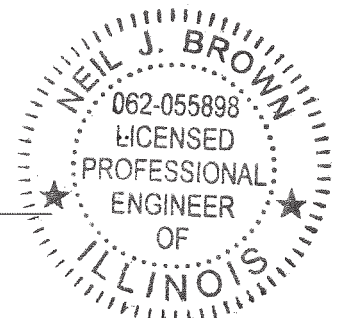
Printed Name:

Neil J. Brown

7/17/18

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Date:



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





Analytical Data Summary

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A

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.
- 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.
-  = Headspace reading exceeds background levels
-  = Concentration exceeds the most stringent MAC, but is below the MAC for an MSA.
-  = Concentration exceeds the most stringent MAC and the MAC for Chicago corporate limits.
-  = Concentration exceeds applicable comparison criteria.

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)				Comparison Criteria					
	3516-01-B01	3516-01-B02	3516-01-B03	3516-01-B04	MACs			TACO		
SAMPLE	3516-01-B01 (0-2)	3516-01-B02 (0-2)	3516-01-B03 (0-2)	3516-01-B04 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-2	0-2	0-2	0-2						
pH	8.4	7.8	7.8	7.1						
PID > Bkgd.	--	--	--	--						
VOCs (mg/kg)										
Acetone	0.015 J	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Methylene Chloride	0.0033 J	0.0062	0.0045	0.0035 J	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)										
2-Methylnaphthalene	0.025 J	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.0068 J	0.030 J	0.0061 J	0.0059 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.015 J	0.040	0.015 J	0.014 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.017 J	0.059	0.016 J	0.017 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	0.015 J	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	0.024 J	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	ND U	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	0.046	ND U	ND U	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.011 J	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.0091 J	0.056	ND U	0.0077 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.012 J	0.026 J	0.011 J	0.011 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.023 J	0.061	ND U	0.0059 J	--	--	--	--	--	--
Pyrene	0.0099 J	0.062	ND U	ND U	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Arsenic	4.9	5.2	3.6	5.9	11.3	13	--	13	61	--
Barium	65	52	30	48	1,500	--	--	5,500	14,000	--
Beryllium	0.43	0.46	0.26	0.34	22	--	--	160	410	--
Boron	ND U	5.9	ND U	ND U	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	ND U	5.2	--	--	78	200	--
Calcium	3,700	7,900	4,800	4,700	--	--	--	--	--	--
Chromium	11	12	7.8	9.0	21	--	--	230	690	--
Cobalt	6.1	5.3	3.0	3.6	20	--	--	4,700	12,000	--
Copper	9.3	12	4.1	8.5	2,900	--	--	2,900	8,200	--
Iron	11,000	13,000	8,300	11,000	15,000	15,900	--	--	--	--
Lead	13	37	6.8	12	107	--	--	400	700	--
Magnesium	2,100	4,300	2,800	2,200	325,000	--	--	--	730,000	--
Manganese	360	230	110	170	630	636	--	1,600	4,100	--
Mercury	0.028	0.031	0.018 J	0.026	0.89	--	--	10	0.1	--
Nickel	12	13	7.0	7.8	100	--	--	1,600	4,100	--
Potassium	790	940	410	520	--	--	--	--	--	--
Selenium	ND U	0.38 J	ND U	0.71	1.3	--	--	390	1,000	--
Silver	0.19 J	0.17 J	0.15 J	0.11 J	4.4	--	--	390	1,000	--
Sodium	550	690	250	270	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	21	22	14	17	550	--	--	550	1,400	--
Zinc	38	58	19	33	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.18 J	0.22 J	0.24 J	0.18 J	--	--	--	--	--	2
Boron	ND U	0.099 J	0.080 J	0.073 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.23 L	0.24 L	0.49 L	0.10	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.088 J	0.063 J	0.051 J	0.031 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.41 L	0.36 L	0.26 L	NA	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)				Comparison Criteria					
	3516-01-B05	3516-01-B06	3516-01-B07	3516-01-B08	MACs			TACO		
BORING	3516-01-B05 (0-2)	3516-01-B06 (0-2)	3516-01-B07 (0-2)	3516-01-B08 (0-1.4)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil						
MATRIX	0-2	0-2	0-2	0-1.4						
DEPTH (feet)	7.7	7.6	8.5	8.2						
pH	--	--	--	--						
PID > Bkgd.										
VOCs (mg/kg)										
Acetone	ND U	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Methylene Chloride	0.0030 J	0.0035 J	ND U	0.0046 J	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	0.016 J	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	0.0095 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	0.0061 J	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	0.012 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.012 J	ND U	0.047	0.069	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.024 J	ND U	0.092 †	0.11 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.027 J	0.012 J	0.12	0.14	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	0.044	0.058	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	0.053	0.046	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	ND U	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.014 J	ND U	0.056	0.093	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.0076 J	0.018 J	0.016 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.017 J	ND U	0.048	0.10	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.016 J	ND U	0.049	0.045	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	0.0059 J	1.8	--	--	170	1.8	--
Phenanthrene	0.012 J	ND U	0.028 J	0.073	--	--	--	--	--	--
Pyrene	0.017 J	ND U	0.060	0.11	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Arsenic	4.9	3.8	4.5	5.3	11.3	13	--	13	61	--
Barium	52	47	120	51	1,500	--	--	5,500	14,000	--
Beryllium	0.43	0.35	0.40	0.48	22	--	--	160	410	--
Boron	5.7	ND U	6.4	5.7	40	--	--	16,000	41,000	--
Cadmium	ND U	ND U	ND U	ND U	5.2	--	--	78	200	--
Calcium	12,000	3,900	5,500	25,000	--	--	--	--	--	--
Chromium	11	10	26 †	11	21	--	--	230	690	--
Cobalt	6.5	3.7	5.1	6.5	20	--	--	4,700	12,000	--
Copper	11	6.7	12	14	2,900	--	--	2,900	8,200	--
Iron	11,000	10,000	12,000	14,000	15,000	15,900	--	--	--	--
Lead	22	8.0	27	51	107	--	--	400	700	--
Magnesium	7,100	2,100	2,700	12,000	325,000	--	--	--	730,000	--
Manganese	290	130	260	290	630	636	--	1,600	4,100	--
Mercury	0.029	0.021	0.024	0.030	0.89	--	--	10	0.1	--
Nickel	12	9.0	12	15	100	--	--	1,600	4,100	--
Potassium	870	560	820	930	--	--	--	--	--	--
Selenium	0.53 J	0.51 J	0.38 J	0.41 J	1.3	--	--	390	1,000	--
Silver	0.16 J	0.13 J	0.17 J	0.15 J	4.4	--	--	390	1,000	--
Sodium	370	440	960	880	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	20	17	21	23	550	--	--	550	1,400	--
Zinc	48	29	48	61	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.27 J	0.15 J	0.19 J	0.32 J	--	--	--	--	--	2
Boron	0.057 J	0.091 J	0.11 J	0.067 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	0.0020 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.17 L	0.11	0.79 L	0.38 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.021 J	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	0.30 L	NA	0.50 L	0.50 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)			Comparison Criteria					
	3516-01-B09	3516-01-B10	3516-01-B11	MACs			TACO		
SAMPLE	3516-01-B09 (0-2)	3516-01-B10 (0-2)	3516-01-B11 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil						
DEPTH (feet)	0-2	0-2	0-2						
pH	8.5	7.7	7.3						
PID > Bkgd.	--	--	--						
VOCs (mg/kg)									
Acetone	ND U	ND U	ND U	25	--	--	70,000	100,000	--
Methylene Chloride	0.0023 J	ND U	0.0031 J	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)									
2-Methylnaphthalene	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	ND U	0.012 J	0.015 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.012 J	0.021 J	0.026 J	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.011 J	0.028 J	0.033 J	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	ND U	ND U	ND U	--	--	--	--	--	--
Benzo(k)fluoranthene	ND U	ND U	ND U	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	ND U	0.015 J	0.019 J	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	ND U	ND U	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	ND U	0.019 J	0.027 J	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	ND U	0.014 J	0.018 J	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	ND U	0.0097 J	0.018 J	--	--	--	--	--	--
Pyrene	ND U	0.019 J	0.029 J	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)									
Arsenic	7.7	7.3	7.4	11.3	13	--	13	61	--
Barium	63	120	110	1,500	--	--	5,500	14,000	--
Beryllium	0.54	0.61	0.66	22	--	--	160	410	--
Boron	6.1	5.0	ND U	40	--	--	16,000	41,000	--
Cadmium	0.47	ND U	ND U	5.2	--	--	78	200	--
Calcium	63,000	4,500	5,600	--	--	--	--	--	--
Chromium	13	17	17	21	--	--	230	690	--
Cobalt	9.8	15	14	20	--	--	4,700	12,000	--
Copper	15	15	16	2,900	--	--	2,900	8,200	--
Iron	18,000 †m	18,000 †m	18,000 †m	15,000	15,900	--	--	--	--
Lead	16	24	26	107	--	--	400	700	--
Magnesium	21,000	3,700	4,000	325,000	--	--	--	730,000	--
Manganese	490	710 †m	720 †m	630	636	--	1,600	4,100	--
Mercury	0.027	0.039	0.040	0.89	--	--	10	0.1	--
Nickel	19	18	19	100	--	--	1,600	4,100	--
Potassium	1,400	1,400	1,400	--	--	--	--	--	--
Selenium	ND U	0.88	0.97	1.3	--	--	390	1,000	--
Silver	0.23 J	0.29	0.32	4.4	--	--	390	1,000	--
Sodium	1,000	690	410	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	21	30	29	550	--	--	550	1,400	--
Zinc	55	63	66	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)									
Barium	0.32 J	0.36 J	0.48 J	--	--	--	--	--	2
Boron	ND U	0.061 J	0.053 J	--	--	--	--	--	2
Cadmium	ND U	ND U	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.031	0.13	0.11	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)									
Cadmium	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	NA	NA	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)				Comparison Criteria					
	3516-01-B12		3516-01-B13	3516-01-B14	MACs			TACO		
BORING	3516-01-B12 (0-2)		3516-01-B13 (0-2)	3516-01-B14 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	Soil	Soil	Soil	Soil						
MATRIX	0-2	0-2	0-2	0-2						
DEPTH (feet)	7.5	7.8	8.0	8.1						
pH	--	--	--	--						
PID > Bkgd.										
VOCs (mg/kg)										
Acetone	ND U	ND U	ND U	0.022 J	25	--	--	70,000	100,000	--
Methylene Chloride	0.0025 J	ND U	0.0033 J	0.0062	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Anthracene	ND U	ND U	ND U	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.016 J	0.018 J	0.013 J	0.044	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.033 J	0.036 J	0.024 J	0.080	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.040	0.042	0.027 J	0.10	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.016 J	0.018 J	ND U	0.037 J	--	--	--	--	--	--
Benzo(k)fluoranthene	0.012 J	0.017 J	ND U	0.044	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	ND U	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.018 J	0.022 J	0.013 J	0.050	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.0096 J	ND U	ND U	0.0076 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.019 J	0.021 J	0.016 J	0.050	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.021 J	0.023 J	0.018 J	0.043	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.011 J	0.011 J	0.0075 J	0.028 J	--	--	--	--	--	--
Pyrene	0.023 J	0.024 J	0.018 J	0.059	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Arsenic	8.9	6.9	6.7	11	11.3	13	--	13	61	--
Barium	84	74	69	55	1,500	--	--	5,500	14,000	--
Beryllium	0.53	0.59	0.49	0.64	22	--	--	160	410	--
Boron	5.4	5.0	5.5	5.5	40	--	--	16,000	41,000	--
Cadmium	ND U	0.64	3.8	ND U	5.2	--	--	78	200	--
Calcium	17,000	14,000	77,000	5,600	--	--	--	--	--	--
Chromium	13	17	11	15	21	--	--	230	690	--
Cobalt	10	8.6	11	11	20	--	--	4,700	12,000	--
Copper	15	16	12	16	2,900	--	--	2,900	8,200	--
Iron	17,000 †m	17,000 †m	15,000	19,000 †m	15,000	15,900	--	--	--	--
Lead	41	41	23	59	107	--	--	400	700	--
Magnesium	11,000	8,900	19,000	4,200	325,000	--	--	--	730,000	--
Manganese	500	400	520	240	630	636	--	1,600	4,100	--
Mercury	0.026	0.025	0.045	0.032	0.89	--	--	10	0.1	--
Nickel	19	17	21	20	100	--	--	1,600	4,100	--
Potassium	1,200	1,200	1,100	1,200	--	--	--	--	--	--
Selenium	0.52 J	0.66	ND U	0.54 J	1.3	--	--	390	1,000	--
Silver	0.22 J	0.23 J	0.21 J	0.25 J	4.4	--	--	390	1,000	--
Sodium	300	350	500	710	--	--	--	--	--	--
Thallium	0.28 J	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	25	26	18	30	550	--	--	550	1,400	--
Zinc	57	89	210	58	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.33 J	0.34 J	0.55	0.26 J	--	--	--	--	--	2
Boron	0.053 J	0.052 J	ND U	0.099 J	--	--	--	--	--	2
Cadmium	0.0021 J	ND U	0.010 L	ND U	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	0.0078 L	--	--	--	--	--	0.0075
Manganese	0.12	0.26 J L	0.021 J	0.48 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	ND U	0.024 J	0.055 J	ND U	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	0.0020 J	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	0.13 L	--	--	--	--	--	0.0075
Manganese	NA	0.14 J	NA	0.52 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)				Comparison Criteria					
	3516-01-B15	3516-01-B16	3516-01-B17	3516-01-B18	MACs			TACO		
BORING	3516-01-B15 (0-1.8)	3516-01-B16 (0-1.8)	3516-01-B17 (0-2)	3516-01-B18 (0-1.3)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	3516-01-B15 (0-1.8)	3516-01-B16 (0-1.8)	3516-01-B17 (0-2)	3516-01-B18 (0-1.3)						
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-1.8	0-1.8	0-2	0-1.3						
pH	7.8	7.6	7.8	8.1						
PID > Bkgd.	--	--	--	--						
VOCs (mg/kg)										
Acetone	ND U	ND U	0.027	ND U	25	--	--	70,000	100,000	--
Methylene Chloride	0.0029 J	0.0026 J	ND U	0.0049 J	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	0.031 J	ND U	0.0089 J	--	--	--	--	--	--
Acenaphthene	ND U	ND U	0.018 J	0.015 J	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.035 J	ND U	0.0080 J	--	--	--	--	--	--
Anthracene	ND U	0.020 J	0.015 J	0.030 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.021 J	0.13	0.062 J	0.17 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.044	0.18 †	0.10 J †	0.21 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.048	0.25	0.12 J	0.30	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.017 J	0.098 J	0.075 J	0.10	--	--	--	--	--	--
Benzo(k)fluoranthene	0.021 J	0.079	0.049	0.13	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	ND U	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.024 J	0.17	0.070 J	0.18	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	ND U	0.028 J	0.028 J	0.030 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.022 J	0.14	0.080 J	0.26	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.0060 J	0.014 J	0.011 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.024 J	0.088 J	0.074 J	0.097	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	0.0074 J	0.014 J	0.010 J	1.8	--	--	170	1.8	--
Phenanthrene	0.011 J	0.10	0.074	0.16	--	--	--	--	--	--
Pyrene	0.026 J	0.17	0.076	0.29	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Arsenic	7.4	7.0 J	6.6	5.4	11.3	13	--	13	61	--
Barium	41	56	80	80	1,500	--	--	5,500	14,000	--
Beryllium	0.47	0.40	0.70	0.63	22	--	--	160	410	--
Boron	7.2	5.2 J	6.8	6.1	40	--	--	16,000	41,000	--
Cadmium	0.48	0.53	0.45	0.52	5.2	--	--	78	200	--
Calcium	59,000	38,000 J	4,600	11,000	--	--	--	--	--	--
Chromium	13	11	16	17	21	--	--	230	690	--
Cobalt	9.5	5.8	11	8.7	20	--	--	4,700	12,000	--
Copper	18	16 J	16	18	2,900	--	--	2,900	8,200	--
Iron	15,000	13,000	18,000 †m	17,000 †m	15,000	15,900	--	--	--	--
Lead	46	45	21	87	107	--	--	400	700	--
Magnesium	24,000	17,000 J	2,300	5,900	325,000	--	--	--	730,000	--
Manganese	460	390	650 †m	530	630	636	--	1,600	4,100	--
Mercury	0.022	0.037	0.044	0.040	0.89	--	--	10	0.1	--
Nickel	20	13	23	18	100	--	--	1,600	4,100	--
Potassium	1,100	950 J	1,900	1,600	--	--	--	--	--	--
Selenium	ND U	0.34 J	0.75	0.64	1.3	--	--	390	1,000	--
Silver	0.18 J	0.16 J	0.26 J	0.21 J	4.4	--	--	390	1,000	--
Sodium	440	310	1,100	570	--	--	--	--	--	--
Thallium	ND U	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	21	16	29	27	550	--	--	550	1,400	--
Zinc	63	73	67	91	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.27 J	0.38 J	0.21 J	0.38 J	--	--	--	--	--	2
Boron	0.053 J	0.064 J	0.067 J	0.056 J	--	--	--	--	--	2
Cadmium	0.0021 J	0.0025 J	ND U	0.0021 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.047	0.081	0.038	0.25 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	ND U	ND U	ND U	0.21 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	NA	NA	0.66 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)				Comparison Criteria					
	3516-01-B19	3516-01-B20	3516-01-B21	3516-01-B22	MACs			TACO		
SAMPLE	3516-01-B19 (0-2)	3516-01-B20 (0-2)	3516-01-B21 (0-2)	3516-01-B22 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-2	0-2	0-2	0-2						
pH	8.1	8.2	8.2	8.0						
PID > Bkgd.	--	--	--	--						
VOCs (mg/kg)										
Acetone	0.010 J	ND U	0.023	ND U	25	--	--	70,000	100,000	--
Methylene Chloride	0.0025 J	ND U	0.0021 J	ND U	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	0.0091 J	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	0.061	ND U	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	ND U	0.041	ND U	0.010 J	--	--	--	--	--	--
Anthracene	ND U	0.039	ND U	0.013 J	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.036 J	0.38 J	0.038 J	0.084 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.056	0.68 †	0.058	0.13 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.079	0.91 †	0.075	0.18	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.029 J	0.33	0.035 J	0.066	--	--	--	--	--	--
Benzo(k)fluoranthene	0.030 J	0.36	0.027 J	0.068	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	ND U	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	0.076 J	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.040	0.37	0.041	0.090	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.014 J	0.093 †	0.015 J	0.024 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.044	0.27	0.041	0.089	3,100	--	--	3,100	82,000	--
Fluorene	ND U	0.017 J	ND U	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.033 J	0.33	0.038 J	0.062	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	0.0071 J	ND U	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.024 J	0.16	0.017 J	0.051	--	--	--	--	--	--
Pyrene	0.053	0.54	0.045	0.16	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Arsenic	6.7	4.5	5.9	4.2	11.3	13	--	13	61	--
Barium	73	69	70	82	1,500	--	--	5,500	14,000	--
Beryllium	0.66	0.50	0.61	0.62	22	--	--	160	410	--
Boron	5.9	5.9	6.4	6.0	40	--	--	16,000	41,000	--
Cadmium	0.40	0.49	0.53	0.64	5.2	--	--	78	200	--
Calcium	3,800	22,000	15,000	21,000	--	--	--	--	--	--
Chromium	16	12	16	15	21	--	--	230	690	--
Cobalt	14	8.7	9.7	8.5	20	--	--	4,700	12,000	--
Copper	16	14	21	18	2,900	--	--	2,900	8,200	--
Iron	18,000 †m	13,000	18,000 †m	15,000	15,000	15,900	--	--	--	--
Lead	38	71	160 †	68	107	--	--	400	700	--
Magnesium	2,800	13,000	9,600	13,000	325,000	--	--	--	730,000	--
Manganese	600	620	490	570	630	636	--	1,600	4,100	--
Mercury	0.042	0.032	0.035	0.044	0.89	--	--	10	0.1	--
Nickel	23	14	20	19	100	--	--	1,600	4,100	--
Potassium	1,600	1,300	1,600	1,500	--	--	--	--	--	--
Selenium	0.67	0.52 J	ND U	0.59 J	1.3	--	--	390	1,000	--
Silver	0.23 J	0.21 J	0.22 J	0.22 J	4.4	--	--	390	1,000	--
Sodium	730	1,300	1,600	1,700	--	--	--	--	--	--
Thallium	0.33 J	ND U	ND U	ND U	2.6	--	--	6.3	160	--
Vanadium	29	22	27	24	550	--	--	550	1,400	--
Zinc	71	64	92	82	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.29 J	0.35 J	0.33 J	0.32 J	--	--	--	--	--	2
Boron	0.074 J	0.061 J	0.082 J	0.080 J	--	--	--	--	--	2
Cadmium	ND U	0.0030 J	0.0027 J	0.0023 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	ND U	ND U	--	--	--	--	--	5
Lead	ND U	ND U	ND U	ND U	--	--	--	--	--	0.0075
Manganese	0.13	0.62 L	0.59 L	0.37 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.026 J	0.041 J	0.062 J	0.038 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	NA	NA	--	--	--	--	--	0.0075
Manganese	NA	0.82 L	1.0 L	0.77 L	--	--	--	--	--	0.15

PTB #176-001; IDOT Job #D-91-339-15; Project #P-91-217-17; WorkOrder #45A
CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)				Comparison Criteria					
	3516-01-B23	3516-01-B24	3516-01-B25	3516-01-B26	MACs			TACO		
SAMPLE	3516-01-B23 (0-2)	3516-01-B24 (0-2)	3516-01-B25 (0-2)	3516-01-B26 (0-2)	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
MATRIX	Soil	Soil	Soil	Soil						
DEPTH (feet)	0-2	0-2	0-2	0-2						
pH	8.3	8.3	8.2	8.2						
PID > Bkgd.	--	--	--	--						
VOCs (mg/kg)										
Acetone	0.010 J	0.030	0.010 J	ND U	25	--	--	70,000	100,000	--
Methylene Chloride	ND U	ND U	ND U	0.0031 J	0.02	--	--	13	34	--
Toluene	ND U	ND U	ND U	ND U	12	--	--	650	42	--
SVOCs (mg/kg)										
2-Methylnaphthalene	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Acenaphthene	ND U	ND U	0.039	ND U	570	--	--	4,700	120,000	--
Acenaphthylene	0.0060 J	ND U	0.032 J	ND U	--	--	--	--	--	--
Anthracene	0.0084 J	ND U	0.11	ND U	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.062 J	0.047 J	0.47 J	0.073 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.080	0.081	0.49 †	0.12 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	0.13	0.11	0.64	0.16	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.045	0.043	0.23	0.078	--	--	--	--	--	--
Benzo(k)fluoranthene	0.051	0.053	0.24	0.061	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	ND U	ND U	ND U	0.43 J	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	ND U	ND U	ND U	930	--	--	930	930	--
Carbazole	ND U	ND U	ND U	ND U	0.6	--	--	32	6,200	--
Chrysene	0.071	0.049	0.43	0.087	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.017 J	0.014 J	0.067	0.027 J	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	ND U	ND U	ND U	--	--	--	--	--	--
Fluoranthene	0.080	0.042	0.81	0.090	3,100	--	--	3,100	82,000	--
Fluorene	ND U	ND U	0.022 J	ND U	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.043	0.041	0.22	0.071	0.9	1.6	0.9	1.6	170	--
Naphthalene	ND U	ND U	0.0080 J	ND U	1.8	--	--	170	1.8	--
Phenanthrene	0.038 J	0.025 J	0.47	0.036 J	--	--	--	--	--	--
Pyrene	0.14	0.072	0.91	0.093	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)										
Arsenic	3.7	4.7	4.7	5.4	11.3	13	--	13	61	--
Barium	60	60	43	67	1,500	--	--	5,500	14,000	--
Beryllium	0.48	0.53	0.47	0.66	22	--	--	160	410	--
Boron	6.7	4.8	4.4	6.4	40	--	--	16,000	41,000	--
Cadmium	0.39	0.46	ND U	0.52	5.2	--	--	78	200	--
Calcium	17,000	13,000	4,300	17,000	--	--	--	--	--	--
Chromium	15	14	14	17	21	--	--	230	690	--
Cobalt	5.8	8.0	7.7	11	20	--	--	4,700	12,000	--
Copper	14	17	12	19	2,900	--	--	2,900	8,200	--
Iron	12,000	16,000 †m	13,000	16,000 †m	15,000	15,900	--	--	--	--
Lead	26	55	54	53	107	--	--	400	700	--
Magnesium	37,000	7,900	3,500	8,800	325,000	--	--	--	730,000	--
Manganese	430	300	250	450	630	636	--	1,600	4,100	--
Mercury	0.036	0.036	0.024	0.035	0.89	--	--	10	0.1	--
Nickel	13	17	15	25	100	--	--	1,600	4,100	--
Potassium	1,400	1,300	1,100	1,500	--	--	--	--	--	--
Selenium	ND U	0.68	0.41 J	0.41 J	1.3	--	--	390	1,000	--
Silver	0.11 J	0.17 J	0.15 J	0.24 J	4.4	--	--	390	1,000	--
Sodium	1,500	1,500	1,000	1,600	--	--	--	--	--	--
Thallium	ND U	ND U	0.32 J	ND U	2.6	--	--	6.3	160	--
Vanadium	24	29	24	28	550	--	--	550	1,400	--
Zinc	60	70	52	74	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)										
Barium	0.33 J	0.30 J	0.30 J	0.29 J	--	--	--	--	--	2
Boron	0.073 J	0.065 J	0.061 J	0.059 J	--	--	--	--	--	2
Cadmium	0.0020 J	0.0023 J	0.0034 J	0.0024 J	--	--	--	--	--	0.005
Chromium	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Cobalt	ND U	ND U	ND U	ND U	--	--	--	--	--	1
Iron	ND U	ND U	0.26 J	ND U	--	--	--	--	--	5
Lead	ND U	ND U	0.026 L	ND U	--	--	--	--	--	0.0075
Manganese	0.87 L	0.89 L	1.4 L	0.35 L	--	--	--	--	--	0.15
Nickel	ND U	ND U	ND U	ND U	--	--	--	--	--	0.1
Zinc	0.031 J	0.027 J	0.042 J	0.14 J	--	--	--	--	--	5
SPLP Metals (mg/L)										
Cadmium	NA	NA	NA	NA	--	--	--	--	--	0.005
Lead	NA	NA	0.47 L	NA	--	--	--	--	--	0.0075
Manganese	0.92 L	0.73 L	0.82 L	0.97 L	--	--	--	--	--	0.15

CONTAMINANTS OF CONCERN

SITE	ISGS #3516-1 (ROW)	Comparison Criteria					
		MACs			TACO		
BORING	3516-01-B27	Most Stringent	Within an MSA	Within Chicago	Residential	Construction Worker	SCGIER
SAMPLE	3516-01-B27 (0-2)						
MATRIX	Soil						
DEPTH (feet)	0-2						
pH	8.6						
PID > Bkgd.	--						
VOCs (mg/kg)							
Acetone	0.015 J	25	--	--	70,000	100,000	--
Methylene Chloride	0.0034 J	0.02	--	--	13	34	--
Toluene	ND U	12	--	--	650	42	--
SVOCs (mg/kg)							
2-Methylnaphthalene	0.12	--	--	--	--	--	--
Acenaphthene	0.055	570	--	--	4,700	120,000	--
Acenaphthylene	0.019 J	--	--	--	--	--	--
Anthracene	0.075	12,000	--	--	23,000	610,000	--
Benzo(a)anthracene	0.56 J	0.9	1.8	1.1	1.8	170	--
Benzo(a)pyrene	0.77 †	0.09	2.1	1.3	2.1	17	--
Benzo(b)fluoranthene	1.0 †	0.9	2.1	1.5	2.1	170	--
Benzo(g,h,i)perylene	0.35	--	--	--	--	--	--
Benzo(k)fluoranthene	0.42	9	--	--	9	1,700	--
Bis(2-ethylhexyl) phthalate	0.11 J	46	--	--	46	4,100	--
Butyl benzyl phthalate	ND U	930	--	--	930	930	--
Carbazole	ND U	0.6	--	--	32	6,200	--
Chrysene	0.53	88	--	--	88	17,000	--
Dibenz(a,h)anthracene	0.093 †	0.09	0.42	0.2	0.42	17	--
Dibenzofuran	ND U	--	--	--	--	--	--
Fluoranthene	0.55	3,100	--	--	3,100	82,000	--
Fluorene	0.023 J	560	--	--	3,100	82,000	--
Indeno(1,2,3-cd)pyrene	0.34	0.9	1.6	0.9	1.6	170	--
Naphthalene	0.033 J	1.8	--	--	170	1.8	--
Phenanthrene	0.33	--	--	--	--	--	--
Pyrene	0.82	2,300	--	--	2,300	61,000	--
Inorganics (mg/kg)							
Arsenic	5.4	11.3	13	--	13	61	--
Barium	59	1,500	--	--	5,500	14,000	--
Beryllium	0.47	22	--	--	160	410	--
Boron	4.1	40	--	--	16,000	41,000	--
Cadmium	ND U	5.2	--	--	78	200	--
Calcium	5,700	--	--	--	--	--	--
Chromium	16	21	--	--	230	690	--
Cobalt	6.6	20	--	--	4,700	12,000	--
Copper	12	2,900	--	--	2,900	8,200	--
Iron	16,000 †m	15,000	15,900	--	--	--	--
Lead	61	107	--	--	400	700	--
Magnesium	3,800	325,000	--	--	--	730,000	--
Manganese	460	630	636	--	1,600	4,100	--
Mercury	0.030	0.89	--	--	10	0.1	--
Nickel	16	100	--	--	1,600	4,100	--
Potassium	1,100	--	--	--	--	--	--
Selenium	0.53 J	1.3	--	--	390	1,000	--
Silver	0.15 J	4.4	--	--	390	1,000	--
Sodium	1,800	--	--	--	--	--	--
Thallium	ND U	2.6	--	--	6.3	160	--
Vanadium	24	550	--	--	550	1,400	--
Zinc	65	5,100	--	--	23,000	61,000	--
TCLP Metals (mg/L)							
Barium	0.36 J	--	--	--	--	--	2
Boron	0.070 J	--	--	--	--	--	2
Cadmium	0.0035 J	--	--	--	--	--	0.005
Chromium	ND U	--	--	--	--	--	0.1
Cobalt	ND U	--	--	--	--	--	1
Iron	ND U	--	--	--	--	--	5
Lead	0.018 L	--	--	--	--	--	0.0075
Manganese	0.70 L	--	--	--	--	--	0.15
Nickel	ND U	--	--	--	--	--	0.1
Zinc	0.12 J	--	--	--	--	--	5
SPLP Metals (mg/L)							
Cadmium	NA	--	--	--	--	--	0.005
Lead	0.44 L	--	--	--	--	--	0.0075
Manganese	0.83 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: 500-147163-1

Client Project/Site: IDOT - 176-001-WO045

For:

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

Attn: Mr. Dean Tiebout



Authorized for release by:
6/27/2018 9:20:32 AM

Richard Wright, Senior Project Manager
(708)534-5200

richard.wright@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Sample Summary	18
Client Sample Results	19
Definitions	87
QC Association	88
Surrogate Summary	97
QC Sample Results	99
Chronicle	115
Certification Summary	129
Chain of Custody	130
Receipt Checklists	132

Case Narrative

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Job ID: 500-147163-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-147163-1

Receipt

The samples were received on 6/19/2018 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 3.0° 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 438443: Chloromethane, Bromomethane, Chloroethane. 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: The following matrix spike/matrix spike duplicate (MS/MSD) recovered at 0% for one or more analytes: Hexachlorocyclopentadiene and Pentachlorophenol. Data has been qualified and reported. (500-147163-E-1-H MS) and (500-147163-E-1-I MSD)

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 500-437774 and analytical batch 500-438153 was outside control limits for 2,4-Dinitrophenol, Pentachlorophenol, 4,6-Dinitro-2-methylphenol and 3,3'-Dichlorobenzidine. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recoveries were within acceptance limits.

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

Metals

Method(s) 6010B: The method blank for preparation batch 500-437753 and analytical batch 500-438064 contained Magnesium above the reporting limit (RL). Associated sample(s) 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-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B16 (0-1.8)

Lab Sample ID: 500-147163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0026	J	0.0041	0.0016	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.0074	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.031	J	0.078	0.0071	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.035	J	0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluorene	0.0060	J	0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.10		0.038	0.0054	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.020	J	0.038	0.0065	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.14		0.038	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.17		0.038	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.13		0.038	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.17		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.25		0.038	0.0083	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.079		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.18		0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.088	F1	0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.028	J F1	0.038	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.098	F1	0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.0	F1	0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	56	B	0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	5.2	B F1	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.53	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	38000	B	57	9.7	mg/Kg	5	☼	6010B	Total/NA
Chromium	11		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.8	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	16	B F1	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	45		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	17000	B F2	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	390	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	950	F1	29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.34	J F1	0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	0.16	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	310		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	16	B	0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	73	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.064	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0025	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.081		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.037		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B15 (0-1.8)

Lab Sample ID: 500-147163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0029	J	0.0042	0.0017	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.011	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.022	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B15 (0-1.8) (Continued)

Lab Sample ID: 500-147163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.026	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.021	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.024	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.048		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.021	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.044		0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.024	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.017	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.4		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	41	B	0.55	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.47		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	7.2	B	2.7	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.48	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	59000	B	55	9.3	mg/Kg	5	☼	6010B	Total/NA
Chromium	13		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.5	B	0.27	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	18	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	15000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	46		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	24000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	460	B	0.55	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		27	9.7	mg/Kg	1	☼	6010B	Total/NA
Silver	0.18	J	0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	440		55	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21	B	0.27	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	63	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.047		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.022		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: 3516-01-B14 (0-2)

Lab Sample ID: 500-147163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.022	J	0.024	0.011	mg/Kg	1	☼	8260B	Total/NA
Methylene Chloride	0.0062		0.0061	0.0024	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.028	J	0.039	0.0054	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.050		0.039	0.0072	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.059		0.039	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.044		0.039	0.0052	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.050		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.10		0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.044		0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.080		0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.043		0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0076	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.037	J	0.039	0.013	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B14 (0-2) (Continued)

Lab Sample ID: 500-147163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	11		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	55	B	0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.64		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	5.5	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.33	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	5600	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11	B	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	16	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	19000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	59		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4200	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	240	B	0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	20		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.54	J	0.56	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.25	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	710		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	30	B	0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	58	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.26	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Lead	0.0078		0.0075	0.0075	mg/L	1		6010B	TCLP
Manganese	0.48		0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.13		0.0075	0.0075	mg/L	1		6010B	SPLP East
Manganese	0.52		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.032		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B13 (0-2)

Lab Sample ID: 500-147163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0033	J	0.0040	0.0016	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.0075	J	0.037	0.0053	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.016	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.018	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.013	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.013	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.027	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.018	J	0.037	0.0098	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.7		0.54	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	69	B	0.54	0.062	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.49		0.22	0.051	mg/Kg	1	☼	6010B	Total/NA
Boron	5.5	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	3.8	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	77000	B	54	9.2	mg/Kg	5	☼	6010B	Total/NA
Chromium	11		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11	B	0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	12	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B13 (0-2) (Continued)

Lab Sample ID: 500-147163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	15000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	23		0.27	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	19000	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	520	B	0.54	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	21		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1100		27	9.6	mg/Kg	1	☼	6010B	Total/NA
Silver	0.21	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	500		54	8.1	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18	B	0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	210	B	1.1	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	0.55		0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.010		0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.021	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.055	J	0.50	0.020	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	SPLP East
Mercury	0.045		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: 3516-01-B12 (0-2)

Lab Sample ID: 500-147163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0025	J	0.0042	0.0017	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.011	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.019	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.023	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.016	J	0.037	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.018	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.040		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	0.033	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.021	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0096	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.016	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	8.9		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	84	B	0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.53		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	5.4	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.40	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	17000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	10	B	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	15	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	41		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	11000	B	5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	500	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52	J	0.53	0.31	mg/Kg	1	☼	6010B	Total/NA
Silver	0.22	J	0.27	0.068	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B12 (0-2) (Continued)

Lab Sample ID: 500-147163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	300		53	7.9	mg/Kg	1	☼	6010B	Total/NA
Thallium	0.28	J	0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	25	B	0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	57	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.33	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0021	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Manganese	0.12		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.026		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.5		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B12 (0-2)D

Lab Sample ID: 500-147163-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.011	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.021	J	0.037	0.0069	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.024	J	0.037	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.018	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.022	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.042		0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.017	J	0.037	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.036	J	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	0.018	J	0.037	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	6.9		0.54	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	74	B	0.54	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.22	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	5.0	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.64	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	14000	B	11	1.8	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.54	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	8.6	B	0.27	0.071	mg/Kg	1	☼	6010B	Total/NA
Copper	16	B	0.54	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	17000	B	11	5.6	mg/Kg	1	☼	6010B	Total/NA
Lead	41		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	8900	B	5.4	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	400	B	0.54	0.078	mg/Kg	1	☼	6010B	Total/NA
Nickel	17		0.54	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	1200		27	9.5	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.66		0.54	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	0.23	J	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Sodium	350		54	8.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26	B	0.27	0.064	mg/Kg	1	☼	6010B	Total/NA
Zinc	89	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	0.052	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.26		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.024	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.14		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.025		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B12 (0-2)D (Continued)

Lab Sample ID: 500-147163-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B11 (0-2)

Lab Sample ID: 500-147163-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0031	J	0.0045	0.0018	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.018	J	0.039	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.027	J	0.039	0.0073	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.029	J	0.039	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.015	J	0.039	0.0053	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.019	J	0.039	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.033	J	0.039	0.0085	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.026	J	0.039	0.0076	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.018	J	0.039	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.4		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	110	B	0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.66		0.24	0.055	mg/Kg	1	☼	6010B	Total/NA
Boron	4.7	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.36	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	5600	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	14	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	16	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	26		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4000	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	720	B	0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		30	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.97		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	0.32		0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	410		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	29	B	0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	66	B	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.48	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.053	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.040		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	7.3		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B10 (0-2)

Lab Sample ID: 500-147163-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.0097	J	0.037	0.0052	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.019	J	0.037	0.0070	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.019	J	0.037	0.0075	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.012	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.015	J	0.037	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.028	J	0.037	0.0081	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.021	J	0.037	0.0073	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B10 (0-2) (Continued)

Lab Sample ID: 500-147163-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.014	J	0.037	0.0097	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.3		0.57	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	120	B	0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.61		0.23	0.053	mg/Kg	1	☼	6010B	Total/NA
Boron	5.0	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.33	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	4500	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	17		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	15	B	0.28	0.074	mg/Kg	1	☼	6010B	Total/NA
Copper	15	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.9	mg/Kg	1	☼	6010B	Total/NA
Lead	24		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3700	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	710	B	0.57	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	18		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		28	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.88		0.57	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.29		0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Sodium	690		57	8.4	mg/Kg	1	☼	6010B	Total/NA
Vanadium	30	B	0.28	0.067	mg/Kg	1	☼	6010B	Total/NA
Zinc	63	B	1.1	0.50	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	0.13		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.039		0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B09 (0-2)

Lab Sample ID: 500-147163-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0023	J	0.0039	0.0016	mg/Kg	1	☼	8260B	Total/NA
Benzo[b]fluoranthene	0.011	J	0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.012	J	0.038	0.0073	mg/Kg	1	☼	8270D	Total/NA
Arsenic	7.7		0.53	0.18	mg/Kg	1	☼	6010B	Total/NA
Barium	63	B	0.53	0.061	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.54		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Boron	6.1	B	2.7	0.25	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.47	B	0.11	0.019	mg/Kg	1	☼	6010B	Total/NA
Calcium	63000	B	53	9.0	mg/Kg	5	☼	6010B	Total/NA
Chromium	13		0.53	0.26	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.8	B	0.27	0.070	mg/Kg	1	☼	6010B	Total/NA
Copper	15	B	0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	18000	B	11	5.5	mg/Kg	1	☼	6010B	Total/NA
Lead	16		0.27	0.12	mg/Kg	1	☼	6010B	Total/NA
Magnesium	21000	B	5.3	2.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	490	B	0.53	0.077	mg/Kg	1	☼	6010B	Total/NA
Nickel	19		0.53	0.15	mg/Kg	1	☼	6010B	Total/NA
Potassium	1400		27	9.4	mg/Kg	1	☼	6010B	Total/NA
Silver	0.23	J	0.27	0.069	mg/Kg	1	☼	6010B	Total/NA
Sodium	1000		53	7.9	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B09 (0-2) (Continued)

Lab Sample ID: 500-147163-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	21	B	0.27	0.063	mg/Kg	1	☼	6010B	Total/NA
Zinc	55	B	1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	0.32	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.031		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.027		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: 3516-01-B08 (0-1.4)

Lab Sample ID: 500-147163-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0046	J	0.0048	0.0019	mg/Kg	1	☼	8260B	Total/NA
Naphthalene	0.0059	J	0.038	0.0059	mg/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	0.016	J	0.077	0.0070	mg/Kg	1	☼	8270D	Total/NA
Acenaphthylene	0.0061	J	0.038	0.0050	mg/Kg	1	☼	8270D	Total/NA
Acenaphthene	0.0095	J	0.038	0.0068	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.073		0.038	0.0053	mg/Kg	1	☼	8270D	Total/NA
Anthracene	0.012	J	0.038	0.0064	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.10		0.038	0.0071	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.11		0.038	0.0076	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.069		0.038	0.0051	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.093		0.038	0.010	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.14		0.038	0.0082	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.046		0.038	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.11		0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.045		0.038	0.0099	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.016	J	0.038	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.058		0.038	0.012	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.3		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	51	B	0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.48		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	5.7	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	25000	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.5	B	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Copper	14	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	14000	B	11	5.7	mg/Kg	1	☼	6010B	Total/NA
Lead	51		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	12000	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	290	B	0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	15		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	930		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.41	J	0.55	0.32	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	880		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	23	B	0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	61	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	0.067	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B08 (0-1.4) (Continued)

Lab Sample ID: 500-147163-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.38		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.50		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.030		0.018	0.0062	mg/Kg	1	☼	7471B	Total/NA
pH	8.2		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B07 (0-2)

Lab Sample ID: 500-147163-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.028	J	0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.048		0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.060		0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.047		0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.056		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.12		0.040	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	0.053		0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.092		0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.049		0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.018	J	0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.044		0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.5		0.57	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	120	B	0.57	0.065	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.40		0.23	0.054	mg/Kg	1	☼	6010B	Total/NA
Boron	6.4	B	2.9	0.27	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35	B	0.11	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	5500	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	26		0.57	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.1	B	0.29	0.075	mg/Kg	1	☼	6010B	Total/NA
Copper	12	B	0.57	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	12000	B	11	6.0	mg/Kg	1	☼	6010B	Total/NA
Lead	27		0.29	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2700	B	5.7	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	260	B	0.57	0.083	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.57	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	820		29	10	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.57	0.34	mg/Kg	1	☼	6010B	Total/NA
Silver	0.17	J	0.29	0.074	mg/Kg	1	☼	6010B	Total/NA
Sodium	960		57	8.5	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21	B	0.29	0.068	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B	1.1	0.50	mg/Kg	1	☼	6010B	Total/NA
Barium	0.19	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.11	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.79		0.025	0.010	mg/L	1		6010B	TCLP
Manganese	0.50		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.024		0.019	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	8.5		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B06 (0-2)

Lab Sample ID: 500-147163-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0035	J	0.0047	0.0019	mg/Kg	1	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B06 (0-2) (Continued)

Lab Sample ID: 500-147163-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.012	J	0.039	0.0084	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.0076	J	0.039	0.0075	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.8		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	47	B	0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.35		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	4.0	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	3900	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	10		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.7	B	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	6.7	B	0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	10000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	8.0		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2100	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	130	B	0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.0		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	560		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.51	J	0.55	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.13	J	0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	440		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17	B	0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	29	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.091	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.11		0.025	0.010	mg/L	1		6010B	TCLP
Mercury	0.021		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.6		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B05 (0-2)

Lab Sample ID: 500-147163-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0030	J	0.0050	0.0020	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.012	J	0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.017	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.017	J	0.040	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.012	J	0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.014	J	0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.027	J	0.040	0.0086	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.024	J	0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.016	J	0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.9		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	52	B	0.61	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Boron	5.7	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.40	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	12000	B	12	2.1	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.61	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.5	B	0.30	0.080	mg/Kg	1	☼	6010B	Total/NA
Copper	11	B	0.61	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B05 (0-2) (Continued)

Lab Sample ID: 500-147163-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	22		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7100	B	6.1	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	290	B	0.61	0.088	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.61	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	870		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.53	J	0.61	0.36	mg/Kg	1	☼	6010B	Total/NA
Silver	0.16	J	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	370		61	9.0	mg/Kg	1	☼	6010B	Total/NA
Vanadium	20	B	0.30	0.072	mg/Kg	1	☼	6010B	Total/NA
Zinc	48	B	1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.27	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.057	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.17		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.021	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.30		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.029		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.7		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B04 (0-2)

Lab Sample ID: 500-147163-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0035	J	0.0045	0.0018	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.0059	J	0.040	0.0055	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0077	J	0.040	0.0074	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0059	J	0.040	0.0054	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	0.014	J	0.040	0.0077	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.011	J	0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.9		0.59	0.20	mg/Kg	1	☼	6010B	Total/NA
Barium	48	B	0.59	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.34		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	3.8	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.32	B	0.12	0.021	mg/Kg	1	☼	6010B	Total/NA
Calcium	4700	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.0		0.59	0.29	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.6	B	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Copper	8.5	B	0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	12	6.2	mg/Kg	1	☼	6010B	Total/NA
Lead	12		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2200	B	5.9	2.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	170	B	0.59	0.086	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.8		0.59	0.17	mg/Kg	1	☼	6010B	Total/NA
Potassium	520		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.71		0.59	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	0.11	J	0.30	0.077	mg/Kg	1	☼	6010B	Total/NA
Sodium	270		59	8.8	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17	B	0.30	0.070	mg/Kg	1	☼	6010B	Total/NA
Zinc	33	B	1.2	0.52	mg/Kg	1	☼	6010B	Total/NA
Barium	0.18	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.073	J	0.50	0.050	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B04 (0-2) (Continued)

Lab Sample ID: 500-147163-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.10		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.031	J	0.50	0.020	mg/L	1		6010B	TCLP
Mercury	0.026		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA
pH	7.1		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B03 (0-2)

Lab Sample ID: 500-147163-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0045		0.0043	0.0017	mg/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	0.0061	J	0.037	0.0050	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.016	J	0.037	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.015	J	0.037	0.0072	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.011	J	0.037	0.0096	mg/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		0.55	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	30	B	0.55	0.063	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.26		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	2.7	J B	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	4800	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.8		0.55	0.27	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.0	B	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	4.1	B	0.55	0.15	mg/Kg	1	☼	6010B	Total/NA
Iron	8300	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	6.8		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2800	B	5.5	2.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	110	B	0.55	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.0		0.55	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	410		28	9.8	mg/Kg	1	☼	6010B	Total/NA
Silver	0.15	J	0.28	0.071	mg/Kg	1	☼	6010B	Total/NA
Sodium	250		55	8.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14	B	0.28	0.065	mg/Kg	1	☼	6010B	Total/NA
Zinc	19	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.24	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.080	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.49		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.051	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.26		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	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B02 (0-2)

Lab Sample ID: 500-147163-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.0062		0.0048	0.0019	mg/Kg	1	☼	8260B	Total/NA
Phenanthrene	0.061		0.040	0.0056	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.056		0.040	0.0075	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.062		0.040	0.0080	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.030	J	0.040	0.0054	mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.046		0.040	0.011	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.059		0.040	0.0087	mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B02 (0-2) (Continued)

Lab Sample ID: 500-147163-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.024	J	0.040	0.012	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.040		0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.026	J	0.040	0.010	mg/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	0.011	J	0.040	0.0078	mg/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	0.015	J	0.040	0.013	mg/Kg	1	☼	8270D	Total/NA
Arsenic	5.2		0.60	0.21	mg/Kg	1	☼	6010B	Total/NA
Barium	52	B	0.60	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.46		0.24	0.056	mg/Kg	1	☼	6010B	Total/NA
Boron	5.9	B	3.0	0.28	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.41	B	0.12	0.022	mg/Kg	1	☼	6010B	Total/NA
Calcium	7900	B	12	2.0	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.60	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	5.3	B	0.30	0.079	mg/Kg	1	☼	6010B	Total/NA
Copper	12	B	0.60	0.17	mg/Kg	1	☼	6010B	Total/NA
Iron	13000	B	12	6.3	mg/Kg	1	☼	6010B	Total/NA
Lead	37		0.30	0.14	mg/Kg	1	☼	6010B	Total/NA
Magnesium	4300	B	6.0	3.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	230	B	0.60	0.087	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Potassium	940		30	11	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.38	J	0.60	0.35	mg/Kg	1	☼	6010B	Total/NA
Silver	0.17	J	0.30	0.078	mg/Kg	1	☼	6010B	Total/NA
Sodium	690		60	8.9	mg/Kg	1	☼	6010B	Total/NA
Vanadium	22	B	0.30	0.071	mg/Kg	1	☼	6010B	Total/NA
Zinc	58	B	1.2	0.53	mg/Kg	1	☼	6010B	Total/NA
Barium	0.22	J	0.50	0.050	mg/L	1		6010B	TCLP
Boron	0.099	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.24		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.063	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.36		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.031		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA
pH	7.8		0.20	0.20	SU	1		9045D	Total/NA

Client Sample ID: 3516-01-B01 (0-2)

Lab Sample ID: 500-147163-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.015	J	0.017	0.0072	mg/Kg	1	☼	8260B	Total/NA
Methylene Chloride	0.0033	J	0.0042	0.0016	mg/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	0.025	J	0.074	0.0068	mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.023	J	0.036	0.0051	mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.0091	J	0.036	0.0068	mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.0099	J	0.036	0.0073	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	0.0068	J	0.036	0.0049	mg/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	0.017	J	0.036	0.0079	mg/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	0.015	J	0.036	0.0071	mg/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.012	J	0.036	0.0095	mg/Kg	1	☼	8270D	Total/NA
Arsenic	4.9		0.56	0.19	mg/Kg	1	☼	6010B	Total/NA
Barium	65	B	0.56	0.064	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.43		0.22	0.052	mg/Kg	1	☼	6010B	Total/NA
Boron	3.7	B	2.8	0.26	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B01 (0-2) (Continued)

Lab Sample ID: 500-147163-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.28	B	0.11	0.020	mg/Kg	1	☼	6010B	Total/NA
Calcium	3700	B	11	1.9	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.56	0.28	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.1	B	0.28	0.073	mg/Kg	1	☼	6010B	Total/NA
Copper	9.3	B	0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Iron	11000	B	11	5.8	mg/Kg	1	☼	6010B	Total/NA
Lead	13		0.28	0.13	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2100	B	5.6	2.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	360	B	0.56	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	12		0.56	0.16	mg/Kg	1	☼	6010B	Total/NA
Potassium	790		28	9.9	mg/Kg	1	☼	6010B	Total/NA
Silver	0.19	J	0.28	0.072	mg/Kg	1	☼	6010B	Total/NA
Sodium	550		56	8.3	mg/Kg	1	☼	6010B	Total/NA
Vanadium	21	B	0.28	0.066	mg/Kg	1	☼	6010B	Total/NA
Zinc	38	B	1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Barium	0.18	J	0.50	0.050	mg/L	1		6010B	TCLP
Manganese	0.23		0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.088	J	0.50	0.020	mg/L	1		6010B	TCLP
Manganese	0.41		0.025	0.010	mg/L	1		6010B	SPLP East
Mercury	0.028		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA
pH	8.4		0.20	0.20	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-147163-1	3516-01-B16 (0-1.8)	Solid	06/19/18 12:50	06/19/18 16:55
500-147163-2	3516-01-B15 (0-1.8)	Solid	06/19/18 13:10	06/19/18 16:55
500-147163-3	3516-01-B14 (0-2)	Solid	06/19/18 13:20	06/19/18 16:55
500-147163-4	3516-01-B13 (0-2)	Solid	06/19/18 13:30	06/19/18 16:55
500-147163-5	3516-01-B12 (0-2)	Solid	06/19/18 13:35	06/19/18 16:55
500-147163-6	3516-01-B12 (0-2)D	Solid	06/19/18 13:35	06/19/18 16:55
500-147163-7	3516-01-B11 (0-2)	Solid	06/19/18 13:45	06/19/18 16:55
500-147163-8	3516-01-B10 (0-2)	Solid	06/19/18 13:55	06/19/18 16:55
500-147163-9	3516-01-B09 (0-2)	Solid	06/19/18 14:00	06/19/18 16:55
500-147163-10	3516-01-B08 (0-1.4)	Solid	06/19/18 14:05	06/19/18 16:55
500-147163-11	3516-01-B07 (0-2)	Solid	06/19/18 14:15	06/19/18 16:55
500-147163-12	3516-01-B06 (0-2)	Solid	06/19/18 14:25	06/19/18 16:55
500-147163-13	3516-01-B05 (0-2)	Solid	06/19/18 14:30	06/19/18 16:55
500-147163-14	3516-01-B04 (0-2)	Solid	06/19/18 14:40	06/19/18 16:55
500-147163-15	3516-01-B03 (0-2)	Solid	06/19/18 14:45	06/19/18 16:55
500-147163-16	3516-01-B02 (0-2)	Solid	06/19/18 14:50	06/19/18 16:55
500-147163-17	3516-01-B01 (0-2)	Solid	06/19/18 14:55	06/19/18 16:55

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B16 (0-1.8)

Lab Sample ID: 500-147163-1

Date Collected: 06/19/18 12:50

Matrix: Solid

Date Received: 06/19/18 16:55

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Bromomethane	<0.0041	*	0.0041	0.0015	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Chloroethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Chloromethane	<0.0041	*	0.0041	0.0016	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Methylene Chloride	0.0026	J	0.0041	0.0016	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Vinyl acetate	<0.0041		0.0041	0.0014	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	06/19/18 17:51	06/25/18 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		75 - 131	06/19/18 17:51	06/25/18 23:44	1
Dibromofluoromethane	110		75 - 126	06/19/18 17:51	06/25/18 23:44	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 134	06/19/18 17:51	06/25/18 23:44	1
Toluene-d8 (Surr)	111		75 - 124	06/19/18 17:51	06/25/18 23:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B16 (0-1.8)

Lab Sample ID: 500-147163-1

Date Collected: 06/19/18 12:50

Matrix: Solid

Date Received: 06/19/18 16:55

Percent Solids: 83.3

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	☼	06/20/18 18:49	06/22/18 20:24	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Naphthalene	0.0074	J	0.038	0.0059	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Hexachlorocyclopentadiene	<0.78	F1	0.78	0.22	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2-Methylnaphthalene	0.031	J	0.078	0.0071	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,4-Dinitrophenol	<0.78	F2	0.78	0.68	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Acenaphthylene	0.035	J	0.038	0.0051	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Fluorene	0.0060	J	0.038	0.0054	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Pentachlorophenol	<0.78	F1	0.78	0.62	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
4,6-Dinitro-2-methylphenol	<0.78	F2	0.78	0.31	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Phenanthrene	0.10		0.038	0.0054	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Anthracene	0.020	J	0.038	0.0065	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Fluoranthene	0.14		0.038	0.0072	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Pyrene	0.17		0.038	0.0077	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Benzo[a]anthracene	0.13		0.038	0.0052	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1

TestAmerica Chicago

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: IDOT - 176-001-WO045

TestAmerica Job ID: 500-147163-1

Client Sample ID: 3516-01-B16 (0-1.8)

Lab Sample ID: 500-147163-1

Date Collected: 06/19/18 12:50

Matrix: Solid

Date Received: 06/19/18 16:55

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.17		0.038	0.011	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
3,3'-Dichlorobenzidine	<0.19	F1 F2	0.19	0.054	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Di-n-octyl phthalate	<0.19	F1	0.19	0.063	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Benzo[b]fluoranthene	0.25		0.038	0.0083	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Benzo[k]fluoranthene	0.079		0.038	0.011	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Benzo[a]pyrene	0.18		0.038	0.0075	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Indeno[1,2,3-cd]pyrene	0.088	F1	0.038	0.010	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Dibenz(a,h)anthracene	0.028	J F1	0.038	0.0075	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
Benzo[g,h,i]perylene	0.098	F1	0.038	0.012	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	06/20/18 18:49	06/22/18 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	112		46 - 133	06/20/18 18:49	06/22/18 20:24	1
Phenol-d5	101		46 - 125	06/20/18 18:49	06/22/18 20:24	1
Nitrobenzene-d5	96		41 - 120	06/20/18 18:49	06/22/18 20:24	1
2-Fluorobiphenyl	103		44 - 121	06/20/18 18:49	06/22/18 20:24	1
2,4,6-Tribromophenol	90		25 - 139	06/20/18 18:49	06/22/18 20:24	1
Terphenyl-d14	105		35 - 160	06/20/18 18:49	06/22/18 20:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1	F1	1.1	0.22	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Arsenic	7.0	F1	0.57	0.20	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Barium	56	B	0.57	0.065	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Beryllium	0.40		0.23	0.053	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Boron	5.2	B F1	2.9	0.27	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Cadmium	0.53	B	0.11	0.021	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Calcium	38000	B	57	9.7	mg/Kg	☼	06/20/18 16:23	06/22/18 13:00	5
Chromium	11		0.57	0.28	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Cobalt	5.8	B	0.29	0.075	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Copper	16	B F1	0.57	0.16	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Iron	13000	B	11	6.0	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Lead	45		0.29	0.13	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Magnesium	17000	B F2	5.7	2.8	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Manganese	390	B	0.57	0.083	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Nickel	13		0.57	0.17	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Potassium	950	F1	29	10	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Selenium	0.34	J F1	0.57	0.34	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Silver	0.16	J	0.29	0.074	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Sodium	310		57	8.5	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Vanadium	16	B	0.29	0.068	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	1
Zinc	73	B	1.1	0.50	mg/Kg	☼	06/20/18 16:23	06/21/18 14:55	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		06/21/18 15:07	06/22/18 15:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		06/21/18 15:07	06/22/18 15:27	1
Boron	0.064	J	0.50	0.050	mg/L		06/21/18 15:07	06/22/18 15:27	1

TestAmerica Chicago